# ANATOMY AND DRAWING

Victor Perard





Urheberrechtlich geschütztes Material

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# PREFACE TO THE FOURTH EDITION

It has long been known that the study of anatomy leads to the appreciation of form and beauty in art. The human figure is particularly rewarding for study. It has simplicity and beauty of form. It is so balanced and proportioned that it can do much with little effort.

For these reasons, human anatomy is taught in schools of fine arts throughout the world.

The student who buys a book on drawing anatomy needs to have this important subject explained to him as simply as possible.

This *Fourth Edition* of ANATOMY AND DRAWING, including new material on the muscles, has been prepared from this point of view. The human figure is presented in a series of simple diagrams from which all but the necessary naming of parts and

actions has been stripped. The wording is printed in clear juxtaposition to the identified body parts. Skeleton figures or quick body sketches demonstrate actions.

Throughout the book, I have kept the text to the essential minimum and have adhered to the wisdom of the saying, "One picture is worth a thousand words."

SEPTEMBER 1955 VICTOR PERARD

# PREFACE TO THE THIRD EDITION

The purpose of this book is to present in a simple and direct manner the subject of anatomy as it is applied to Art. As little text as possible has been used, and much dependence has been placed on pictorial representations because the latter are a more direct means of impressing the artist with construction and form. For this reason this work has been copiously illustrated, often showing various views of the same structures and actions.

To the beginner the study of anatomy is too often dull, prosaic and difficult and this is due, in large part, to the fact that many text books on the subject contain insufficient descriptive drawings. Even though the student plows through many pages of text, he often fails to visualize the subject properly. Therefore it has been endeavored to substitute illustrations for descriptive text whenever practical. The drawings have been arranged in groups for the purpose of comparison, and in this way the eye becomes accustomed to observe much which otherwise might escape attention.

# Preface

To express outward form correctly requires a knowledge of the internal structure, that is, of the bones which compose the framework and define its proportions and of the muscles and tendons which direct its action.

Every figure artist finds sooner or later, as he advances in his artistic career, that his work needs strengthening through a well grounded knowledge of anatomy. The great masters of the past realized this and their grasp on the fundamentals of anatomy is reflected not only in their finished works, but in such of their preliminary sketches as are still preserved.

The ability to construct figures correctly from the imagination rather than to depend entirely on models is a distinct aid to the draftsman and to the sculptor. The student of anatomy should therefore test his skill by making memory drawings and by applying his knowledge to compositions of his own fancy.

When working from living models, the artist will find that his knowledge of anatomy will enable him to analyze and interpret the forms before him in a more understanding way than he could without such information. It will develop in him greater powers of observation. An understanding of anatomy is an instrument in the mechanics of Art: a means to be employed to assist but never allowed to dominate. The artist must learn properly to evaluate his anatomical information and to know the part it is to play in the development of his art. The studies he makes will then be done more intelligently and with better draftsmanship as an inevitable result.

VICTOR PERARD



# NOTES ON PROPORTION

Since proportion is the comparative relation of one thing to another, some standard or unit of measure must arbitrarily be established. In Art, this unit is known as the "head" which is the distance from the top of the skull to the tip of the chin. The illustrations in this book are based on the proportion of seven and a half "heads" to the height of an erect figure. The use of this standard will obviate much descriptive text. It is well, however, to bear in mind that this standard of proportion is modified by such elements as race, sex,

age and physical differences peculiar to the individual. For this reason the following notes on proportion are grouped under the heads: Male, Female, Children and General Observations.

*Proportions of the Male.* The greatest width of the male figure is at the deltoids, a little below the shoulders and the width here is about two heads.

The width between the hips should equal one and one half heads, and the width between the nipples one head.

The height of the figure, seven and one-half heads, should approximate one "head" for the head, two and three-quarter heads for the neck and trunk, and three and three-quarter heads for the lower extremities.

From the finger tips to the elbow should measure two heads.

*Proportions of the Female.* The bones of the female are shorter and have less rough surfaces than those of the male. The sternum or breast bone is shorter and more curved and the pelvis is broader and shallower which gives a greater width to the hips. The sacrum is wider and projects at an angle backward.

The posterior superior iliac spines and the anterior iliac spines are further apart than those of the male. The distance from the rib cage to the pelvis is greater due to the shallower and broader pelvis.

There is less distance from the crest of the iliacs to the great trochanters of the hips, because the anterior iliac spines are spread out and lower, and further apart. In the female figure the Poupart's ligaments and the furrow of the groin are more horizontal.

The shoulders are narrower and the collar bones (clavicles) straighter and shorter thus giving a more graceful and longer neck and more sloping shoulders in comparison with the square shoulders of the male.

## Notes on Proportion

The arms are shorter in proportion to the trunk which is due to the shorter humerus bone of the female, and because the humerus bone is shorter, the elbow is higher.

Variations in the length of the female leg are more frequent than those of the trunk and so it is more difficult to judge the height of the female figure when seated. But the length of the torso is proportionately longer than in the other sex. The legs are shorter and the skull smaller.

The center of the female figure is above the pubic bone while in the male, the center is about at the pubic bone. The width of the female hips is about the width of the chest wall plus that of one arm and is greater than that of the male of the same height. The fact that the female sacrum is at a greater angle than that of the male and that there is more fat on the buttocks gives these a greater diameter.

The female abdomen, is more rounded and the thighs are thicker from the back to the front than in the other sex.

*Proportions of Children.* The child of three is about one half the height of the adult, and at ten, about three-quarters the height of the adult. As the child grows older the relative sizes of the head and the trunk change. At twenty-five the figure is full grown.

At birth the center of the figure is a little above the navel, at two years at the navel and at three years the center is level with the iliac bone.

With advancing age this point gradually lowers depending to a great extent on the length of the legs.

*General Observations.* The clavicle bone continues to grow for a considerable period after the other bones of the body have attained

their full development and therefore the shoulders are said to broaden.

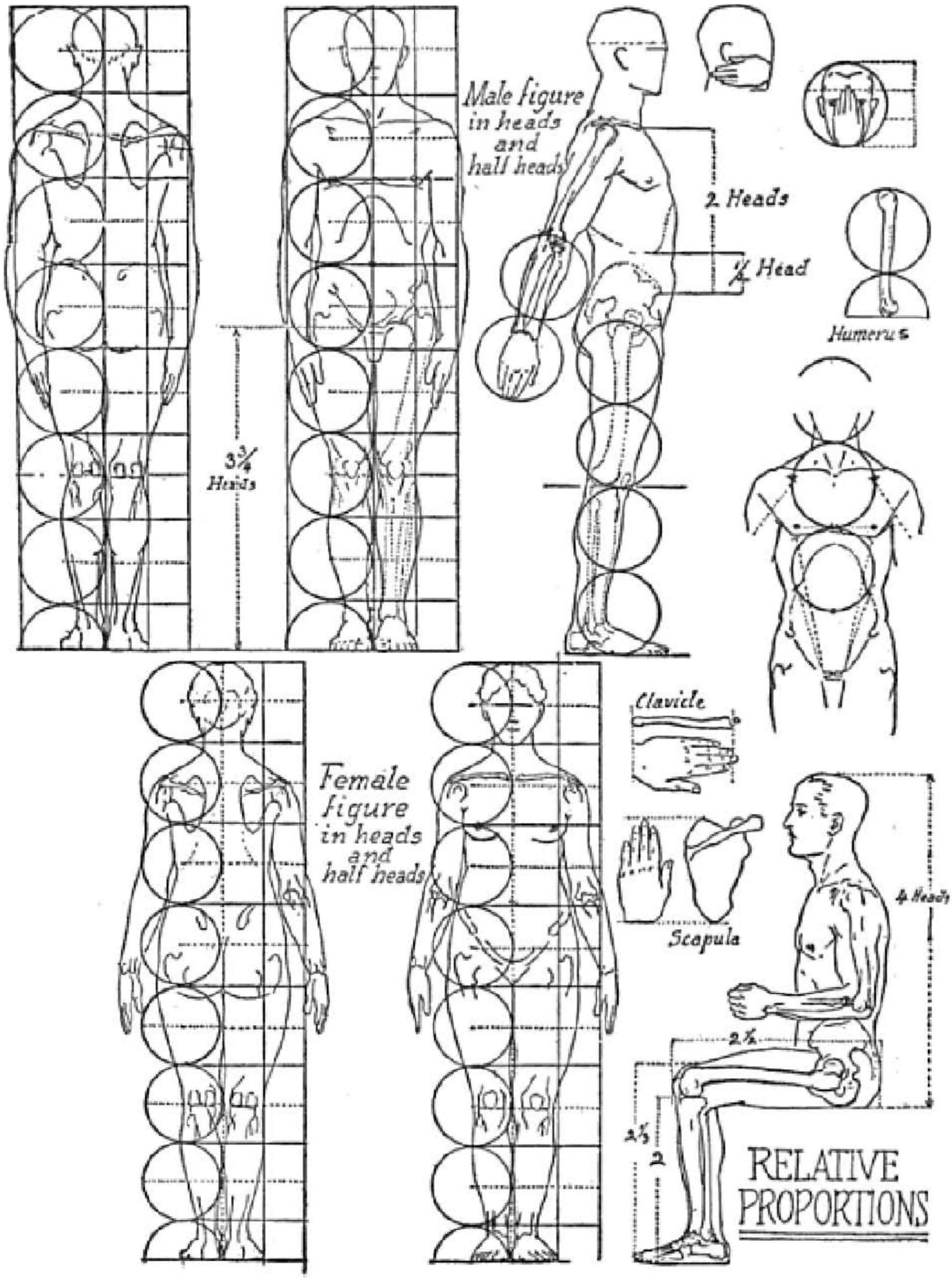
Only very tall people have a height of eight heads. Short people are seven heads or less. The muscles of the adult account for about one half the weight of the body.

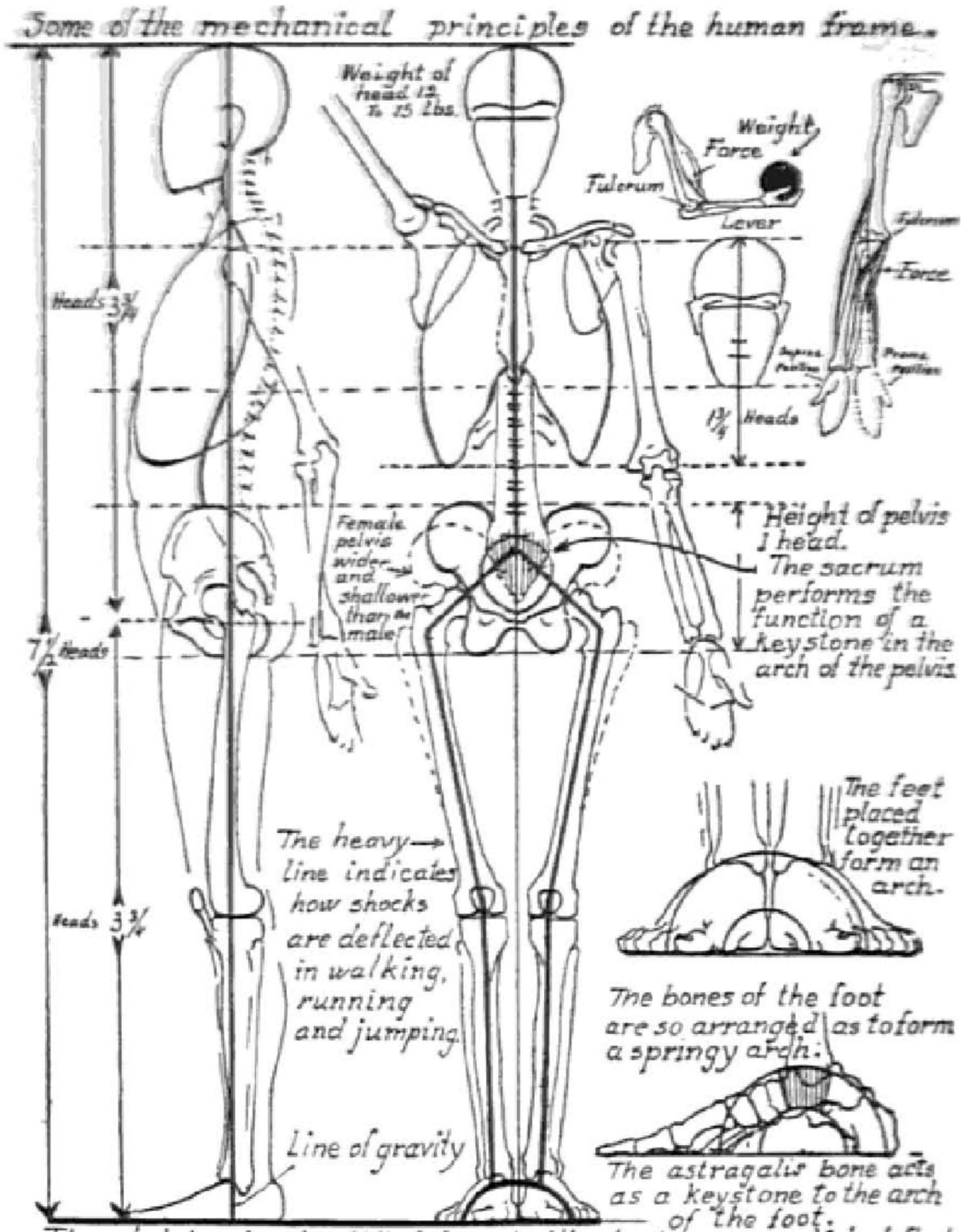
The skeleton always provides the proportions of the figure with slight allowances for the padding between the joints, between each vertebra, and under the heel and foot. In old age the figure shortens due to the hardening and shrinking of the cartilages between the bones.

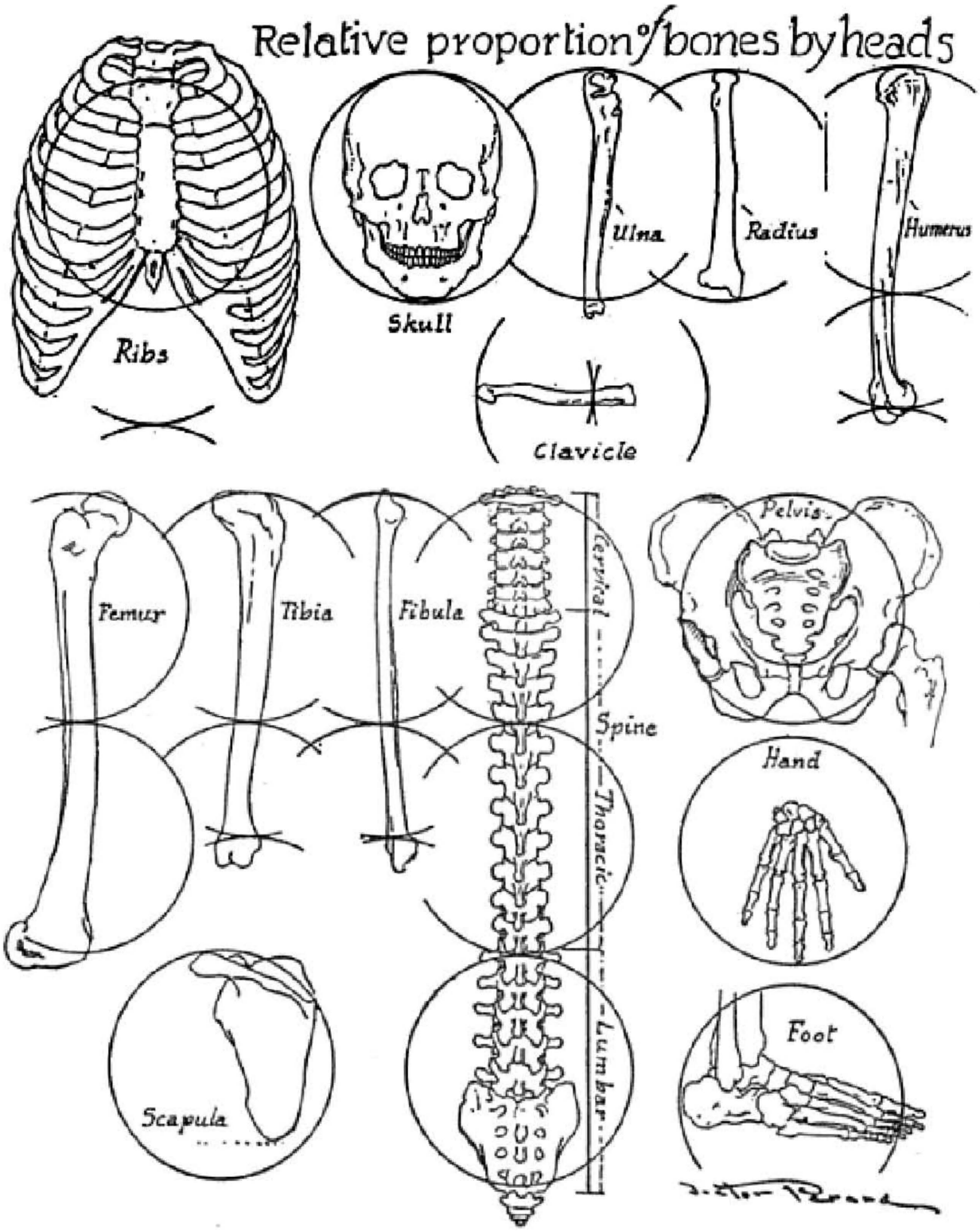


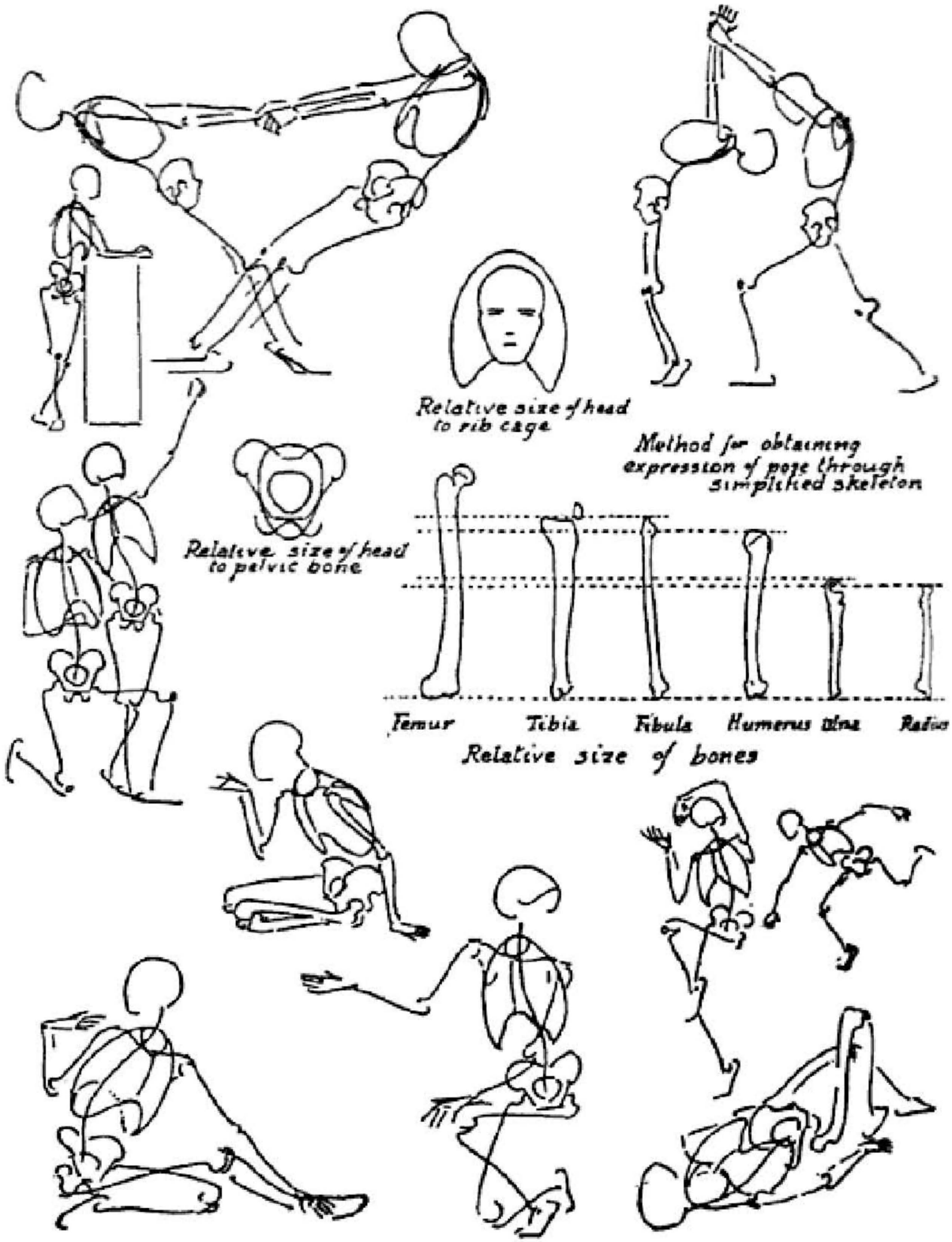
# PART ONE

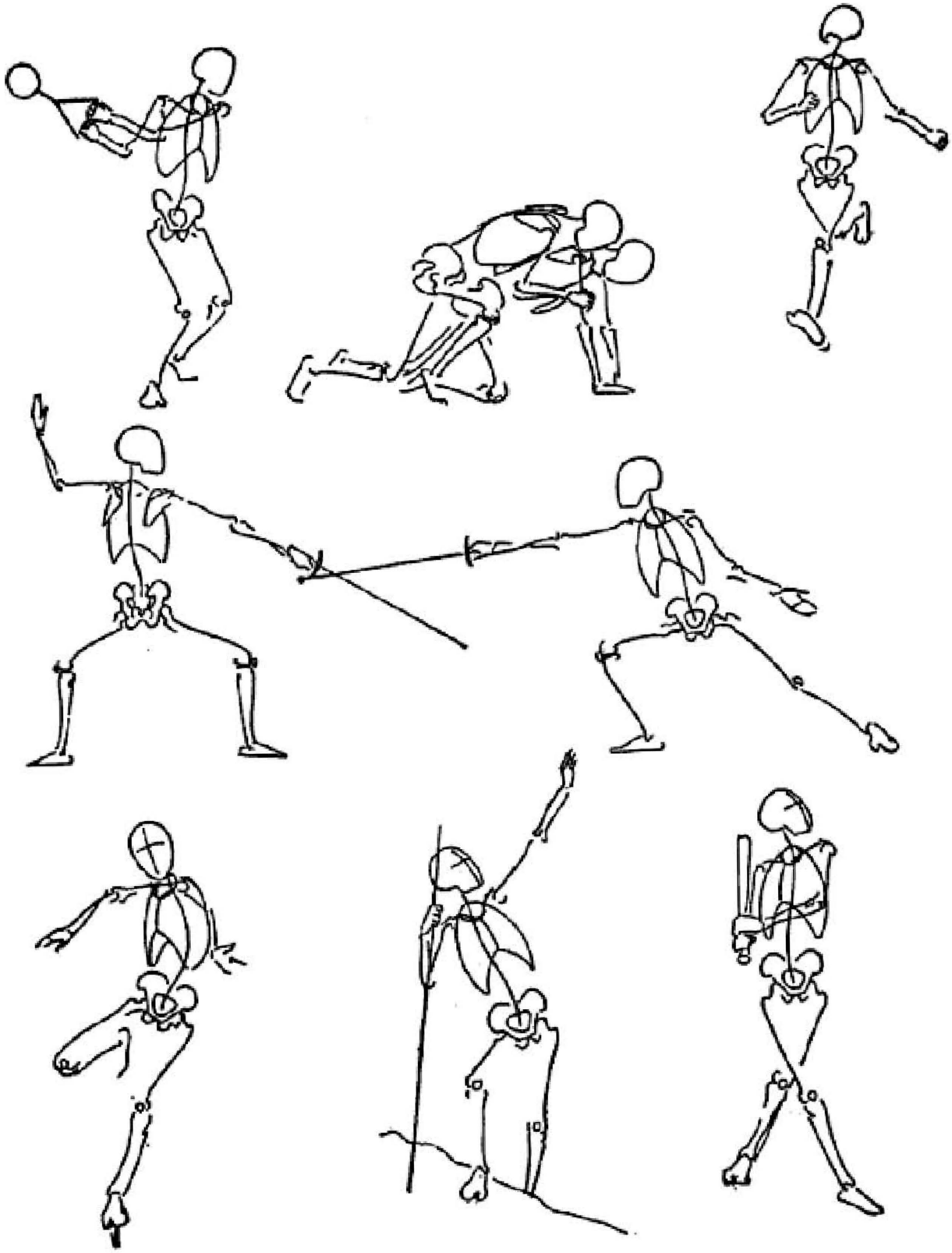
# PROPORTION and DRAWING

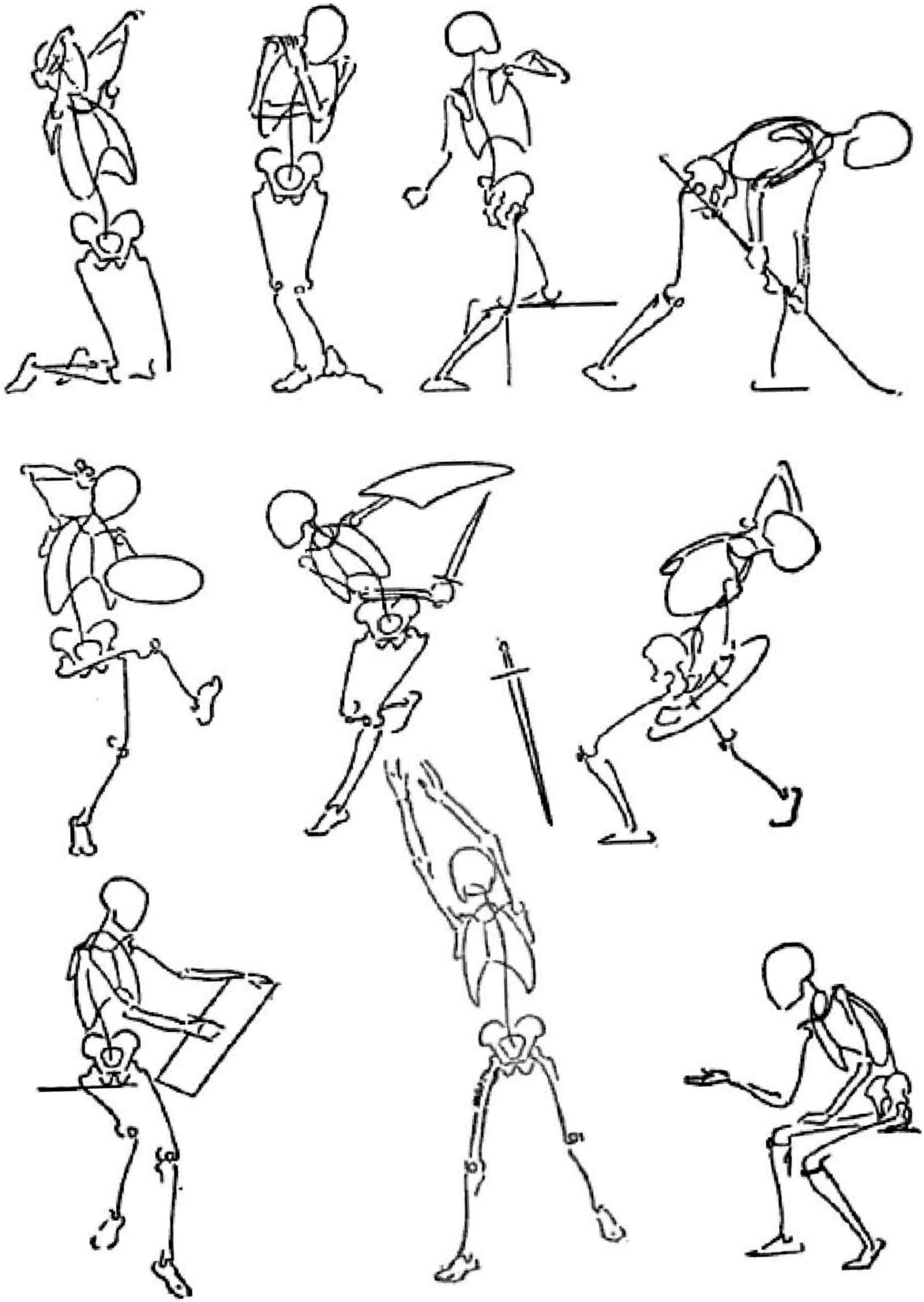

Male figure in heads and half heads
2 Heads
½ Head
Humerus
3¾ Heads
Clavicle
Female figure in heads and half heads
Scapula
4 Heads
2½
2⅓
2
RELATIVE PROPORTIONS

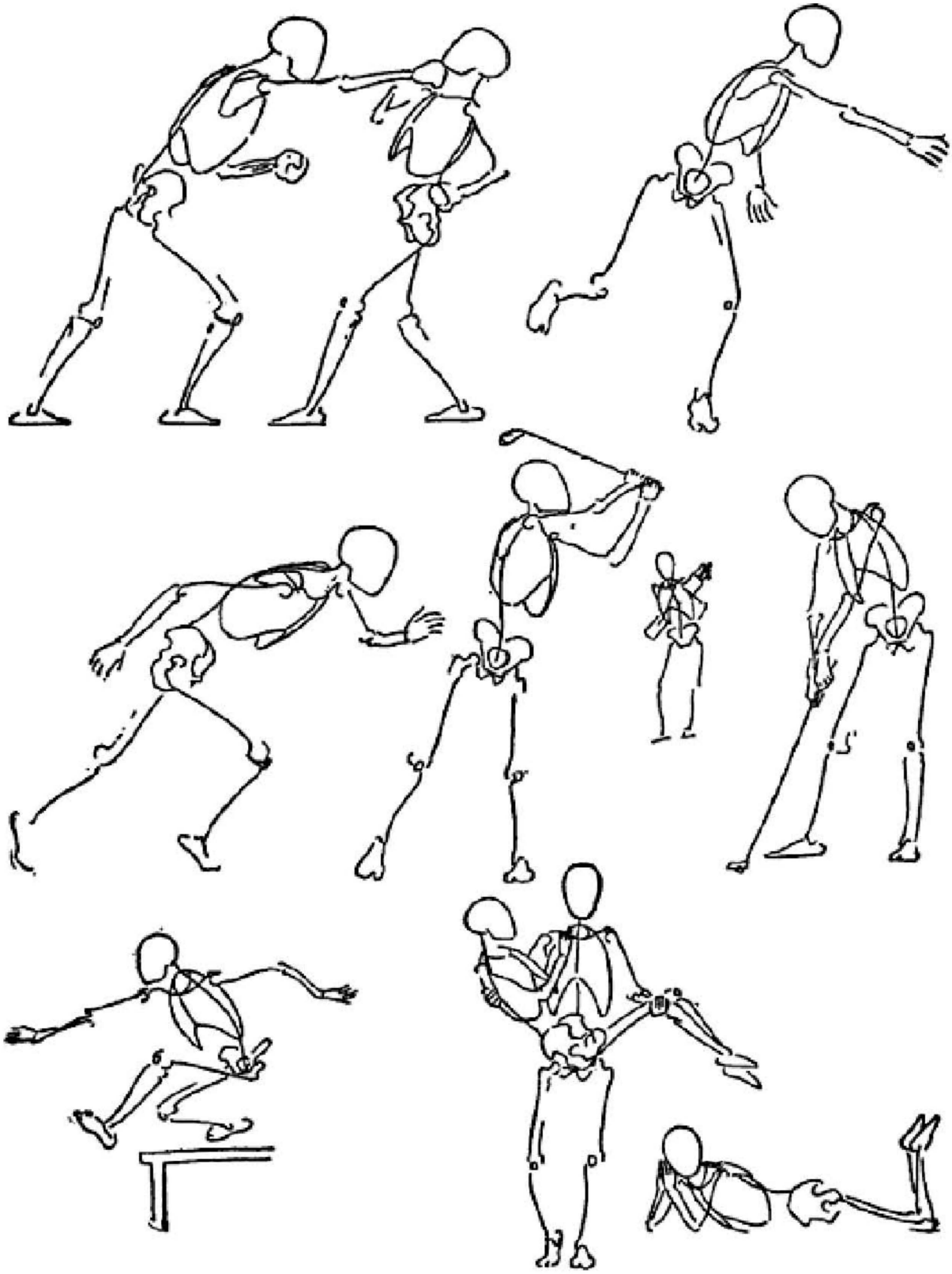

Some of the mechanical principles of the human frame.
Weight of head 12 to 15 lbs.
Weight
Force
Fulcrum
Lever
Fulcrum
Force
Heads 3 3/4
1 3/4 Heads
Height of pelvis 1 head.
The sacrum performs the function of a keystone in the arch of the pelvis
Female pelvis wider and shallower than the male
7 1/2 Heads
The heavy line indicates how shocks are deflected in walking, running and jumping.
Heads 3 3/4
Line of gravity
The feet placed together form an arch.
The bones of the foot are so arranged as to form a springy arch.
The astragalus bone acts as a keystone to the arch of the foot.
The skeleton in simplified form to illustrate curves which deflect shocks and give springiness to the frame.


Relative proportion of bones by heads
Ribs
Skull
Ulna
Radius
Humerus
Clavicle
Femur
Tibia
Fibula
Cervical
Spine
Thoracic
Lumbar
Pelvis
Hand
Foot
Scapula

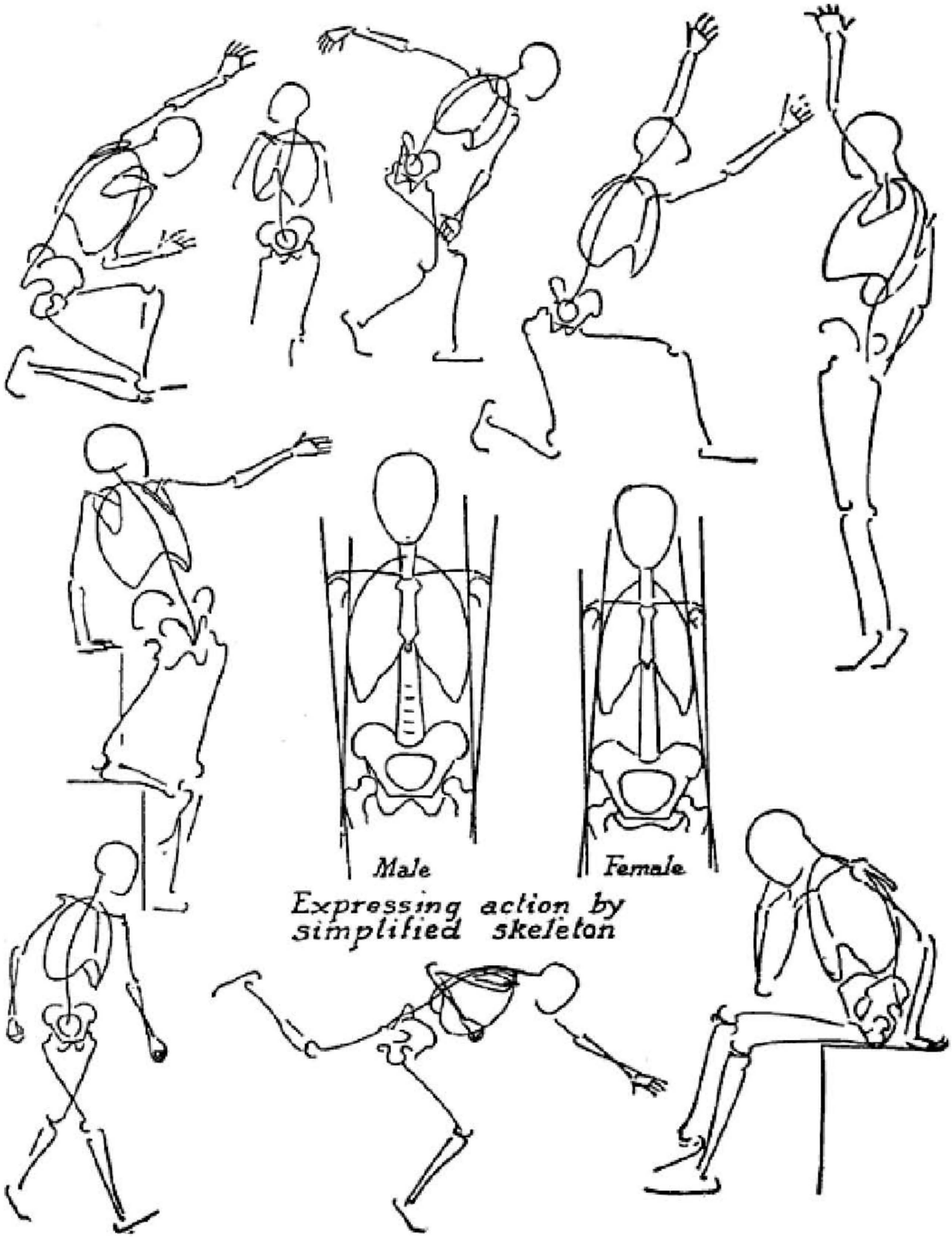

Relative size of head to rib cage
Method for obtaining expression of pose through simplified skeleton
Relative size of head to pelvic bone
Femur
Tibia
Fibula
Humerus
Ulna
Radius
Relative size of bones









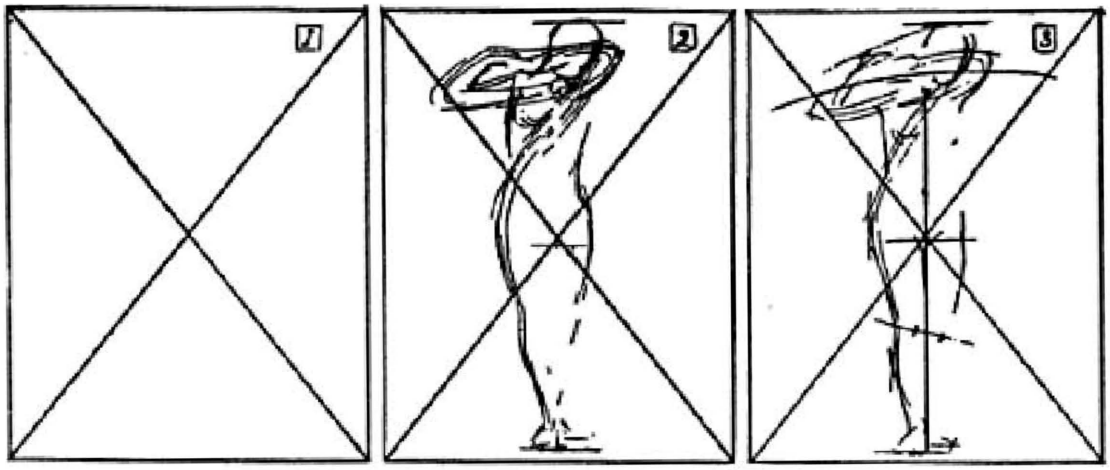


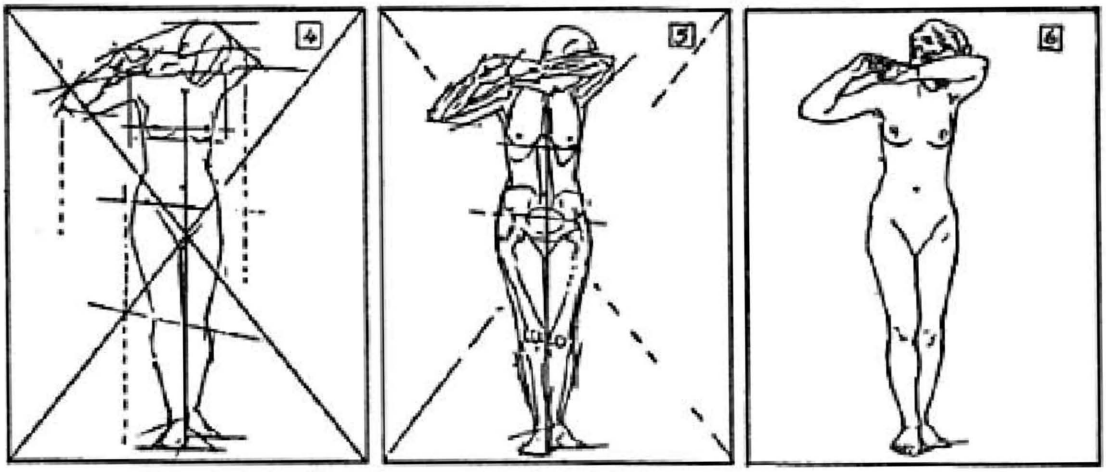

*Expressing action by simplified skeleton*

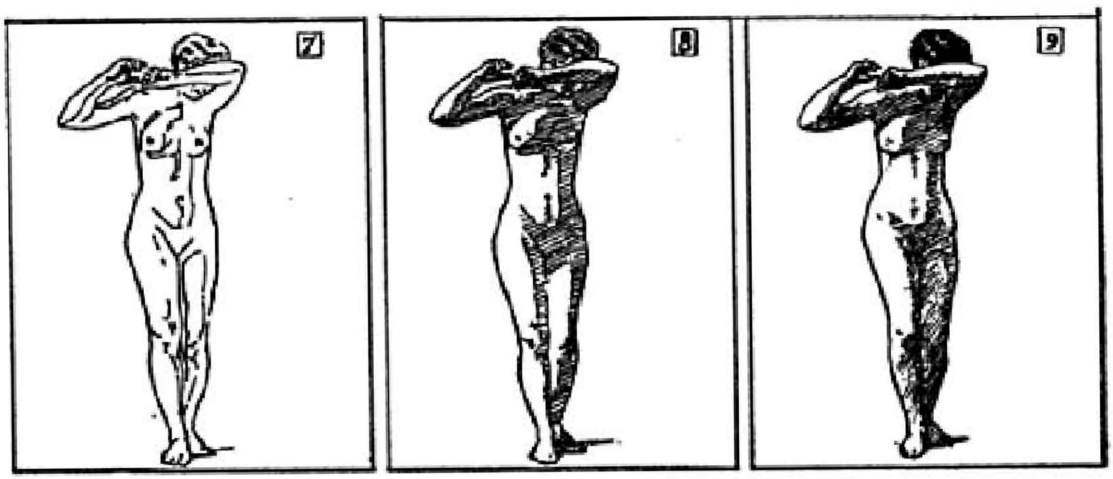
# Method of Drawing

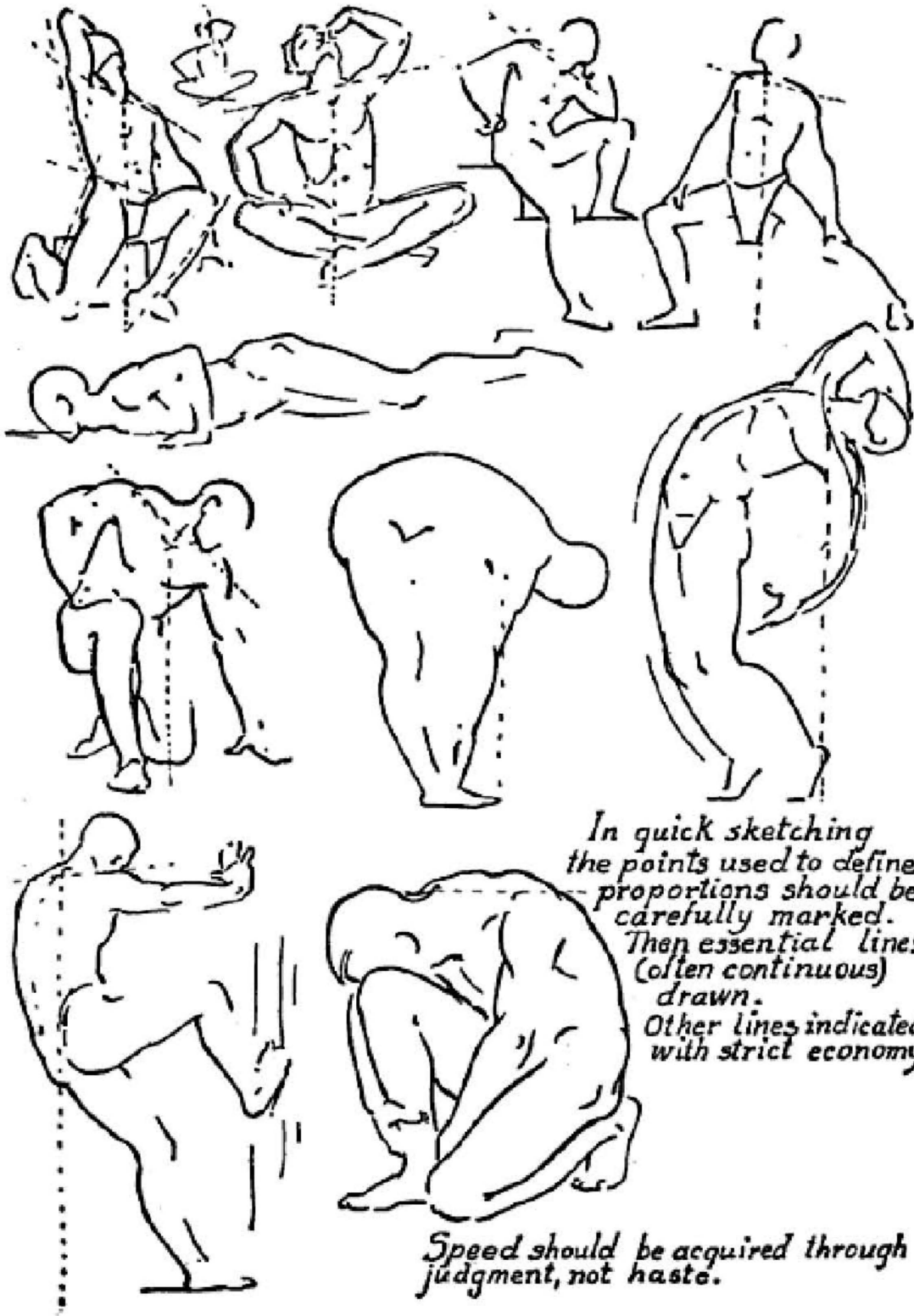
## From Life or from the Cast

1. Find the center of the paper by drawing lines from corner to corner. This is done to help center the study.
2. Measure with the eye or pencil to find the center of the subject and make a line at that point as related to the center of the paper.
   Draw a line at the head and another at the feet.
   With free lines search for the rhythm of the pose, to help visualize the figure and to place it on the paper the size intended.
   Draw lightly so that the mental impression of the figure is not obliterated by a heavy drawing, and corrections can be easily made.
3. Decide where the pit of the neck should be placed and draw a perpendicular line from this point (if a front view) to the feet. If a back view, draw the perpendicular line from the seventh cervical vertebra to the feet.
   Find the line of the shoulders, giving the angle of their positions.
   If a standing figure, first draw the leg on which there is most weight, to obtain the proper balance of the figure.
4. Give the line showing the angle of the position of the pelvis.
   Indicate a line through the knee-caps. Draw the torso, indicating its bulk, marking the width of shoulders, hips, neck and head.
   Block with straight lines going beyond the intersections to obtain a better idea of the direction of line and to avoid a cramped feeling.
5. Sketch within the lines a simplified skeleton, to check up on position of joints and bulk of chest. (Refer to pages on proportion.)
   See that the pit of the neck, the pubic bone, the navel, the pelvis, the knee-caps and the inner ankles are in proper relation to each other.
   Compare relative sizes of head to bulk of torso, hands to face, feet to hands, arms to legs, and thickness of the neck to that of the head, leg and arm.
6. Go over the outline, perfecting it, searching for character and for grace of line.
7. Indicate the outline of the planes and of the principal shadows.
8. Fill in the planes in large surfaces, and connect the shadows as much as possible.
9. Without losing their mass, model the planes keeping well in mind the direction of light.
   In drawing the head, decide on the bulk and draw in the planes of the face (see Part III), then the eyes, the mouth and the nose last.
   It is easier to fit a head on a figure, than to fit a figure to a head.


1
2
3

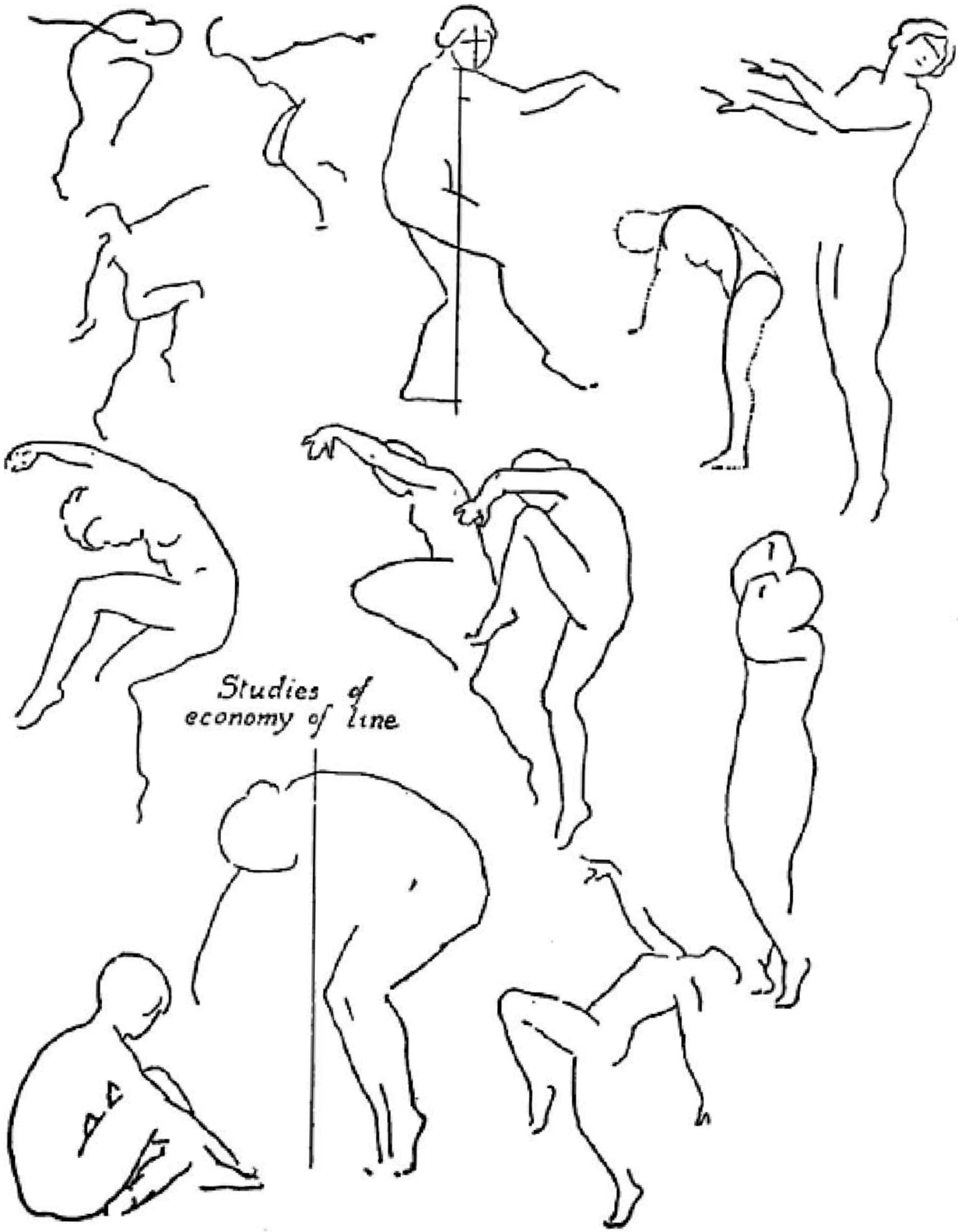

4
5
6

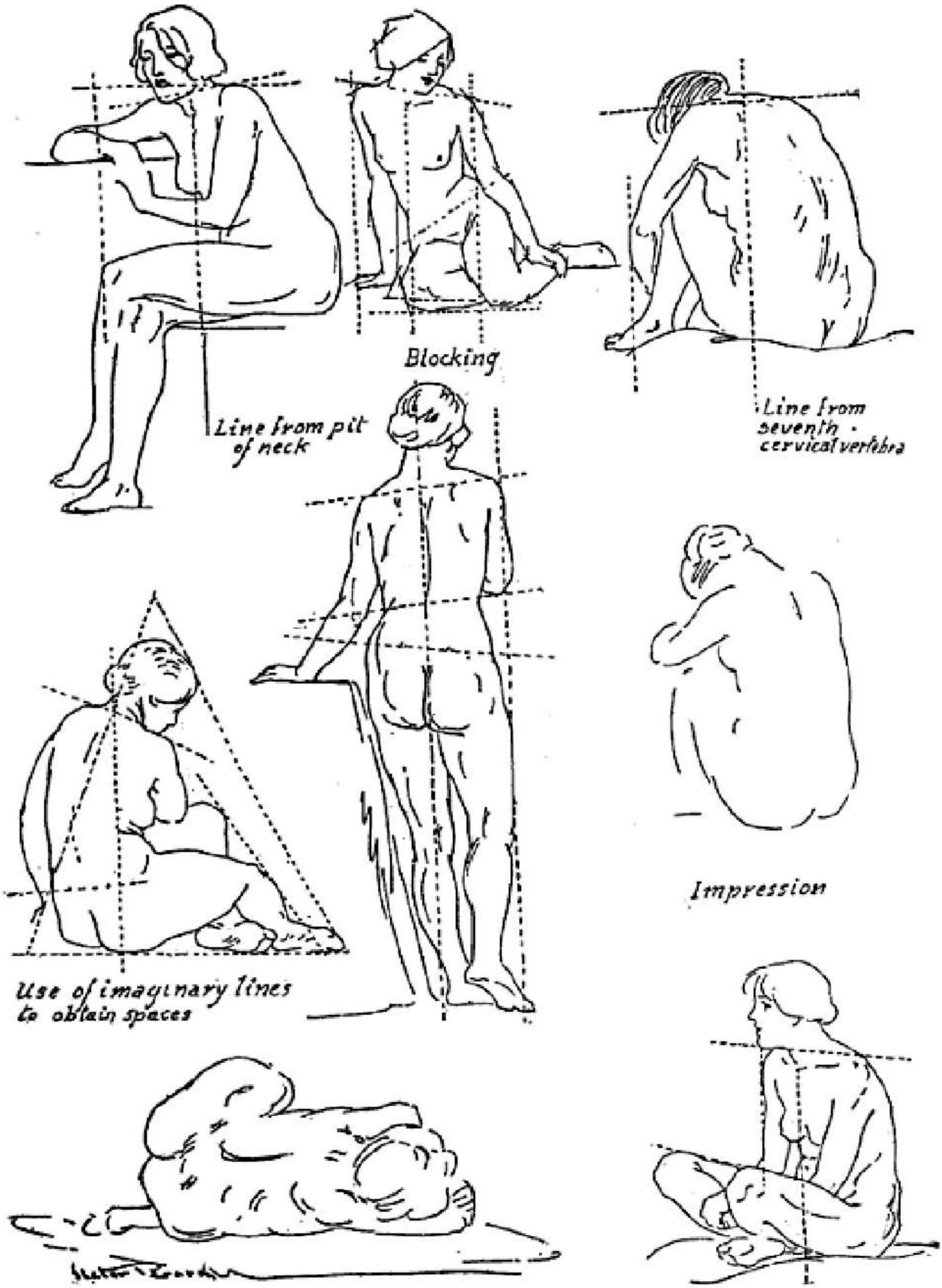

7
8
9


In quick sketching the points used to define proportions should be carefully marked. Then essential lines (often continuous) drawn. Other lines indicated with strict economy.
Speed should be acquired through judgment, not haste.

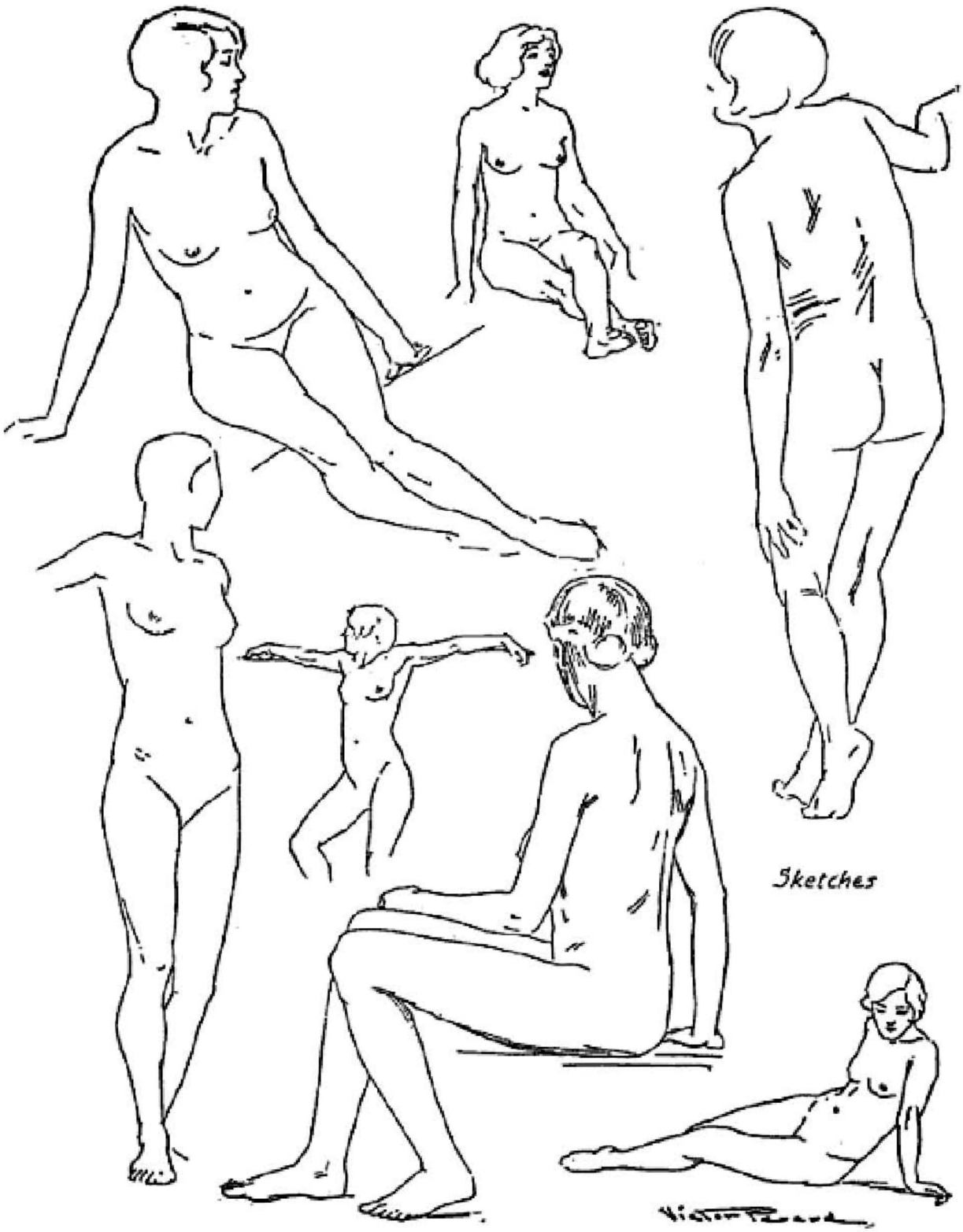

Aids to quick sketching.
Indicate the angle of the shoulders, then the line of gravity, then express the pose with as few lines as possible.
Line of gravity
For line of gravity in back view, draw a vertical line from back of the neck.

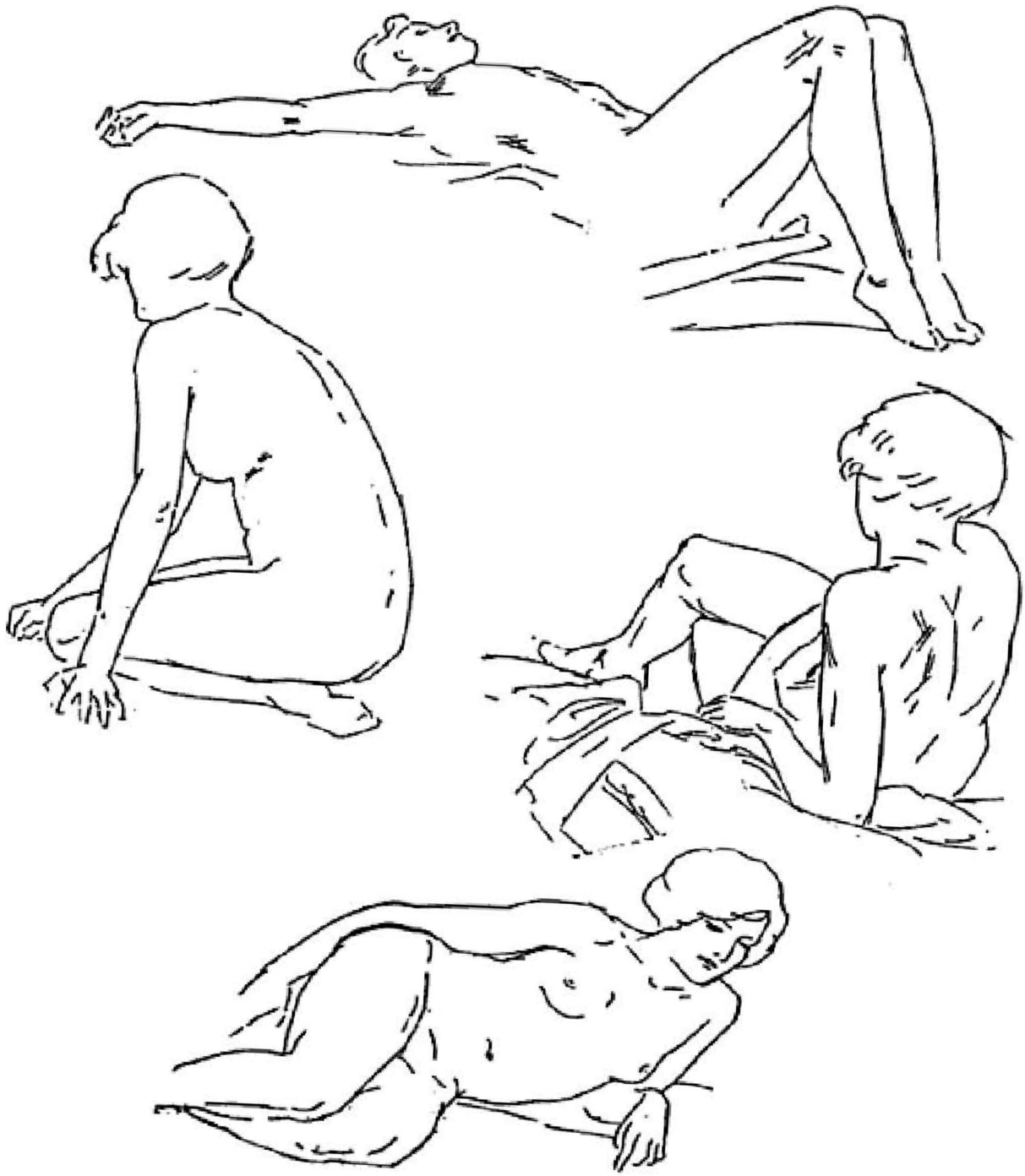

Five minute sketches for quick decision of action and proportions

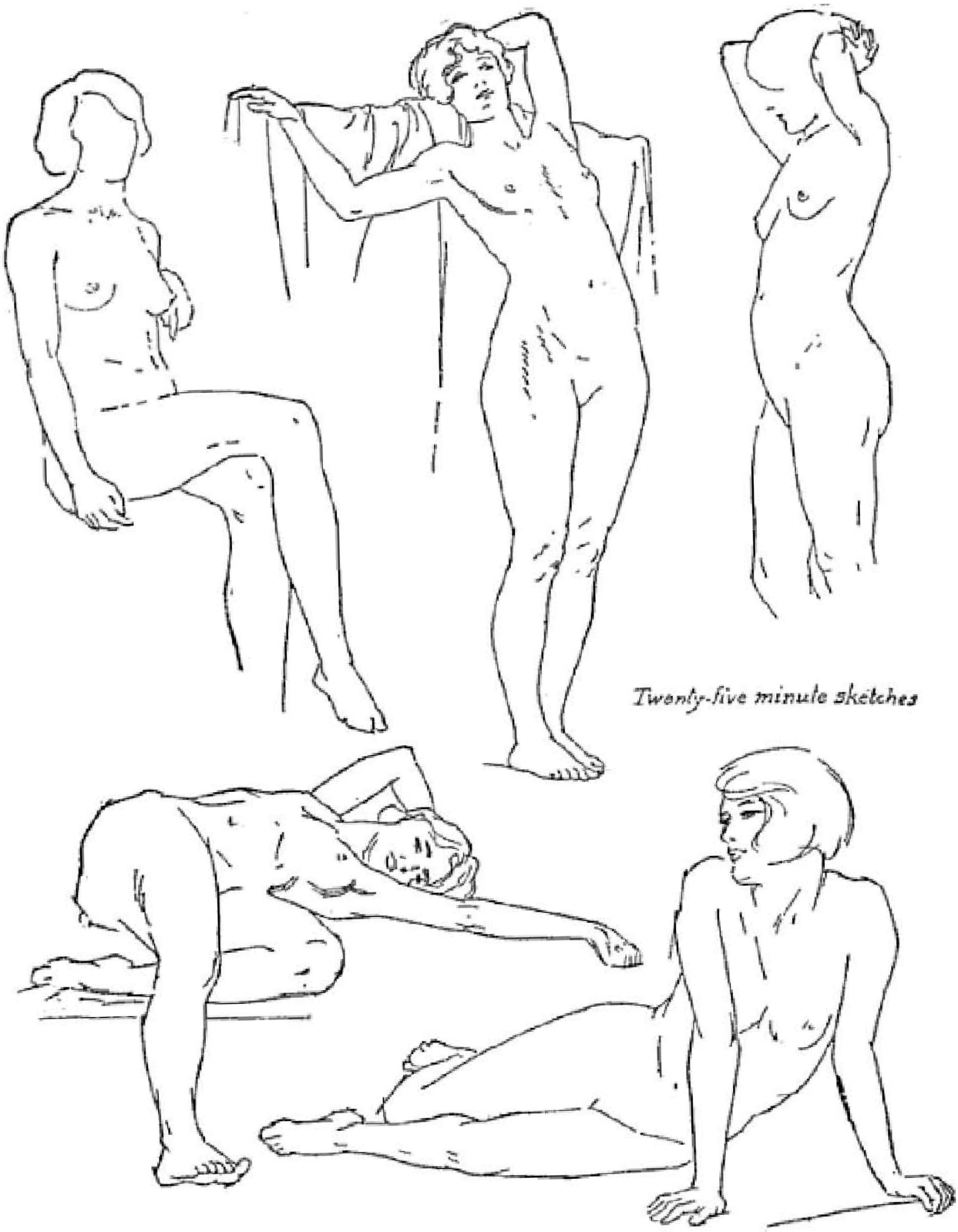

Studies of
economy of line


Blocking
Line from pit of neck
Line from seventh cervical vertebra
Impression
Use of imaginary lines to obtain spaces

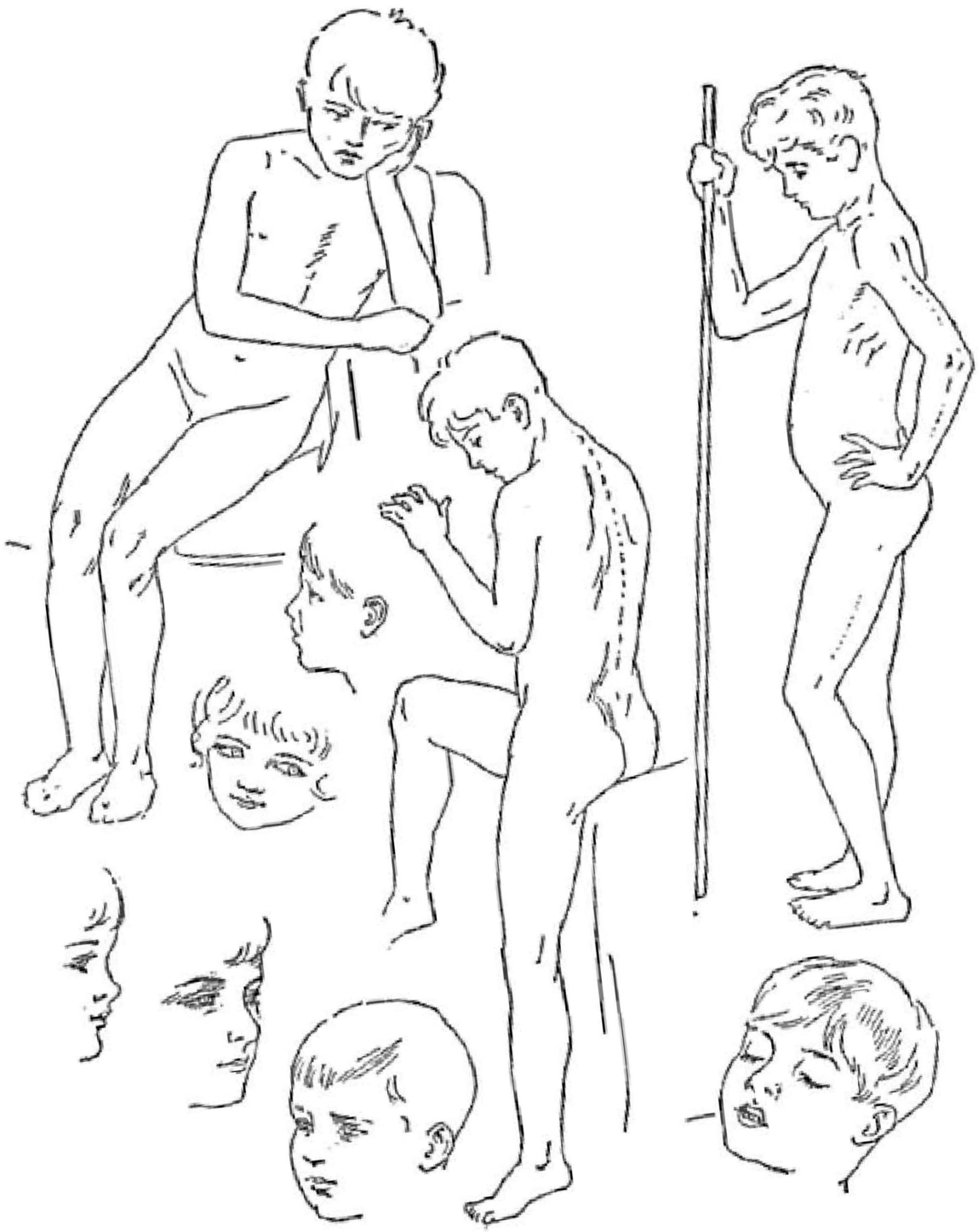

Studies for the
value and economy
of line

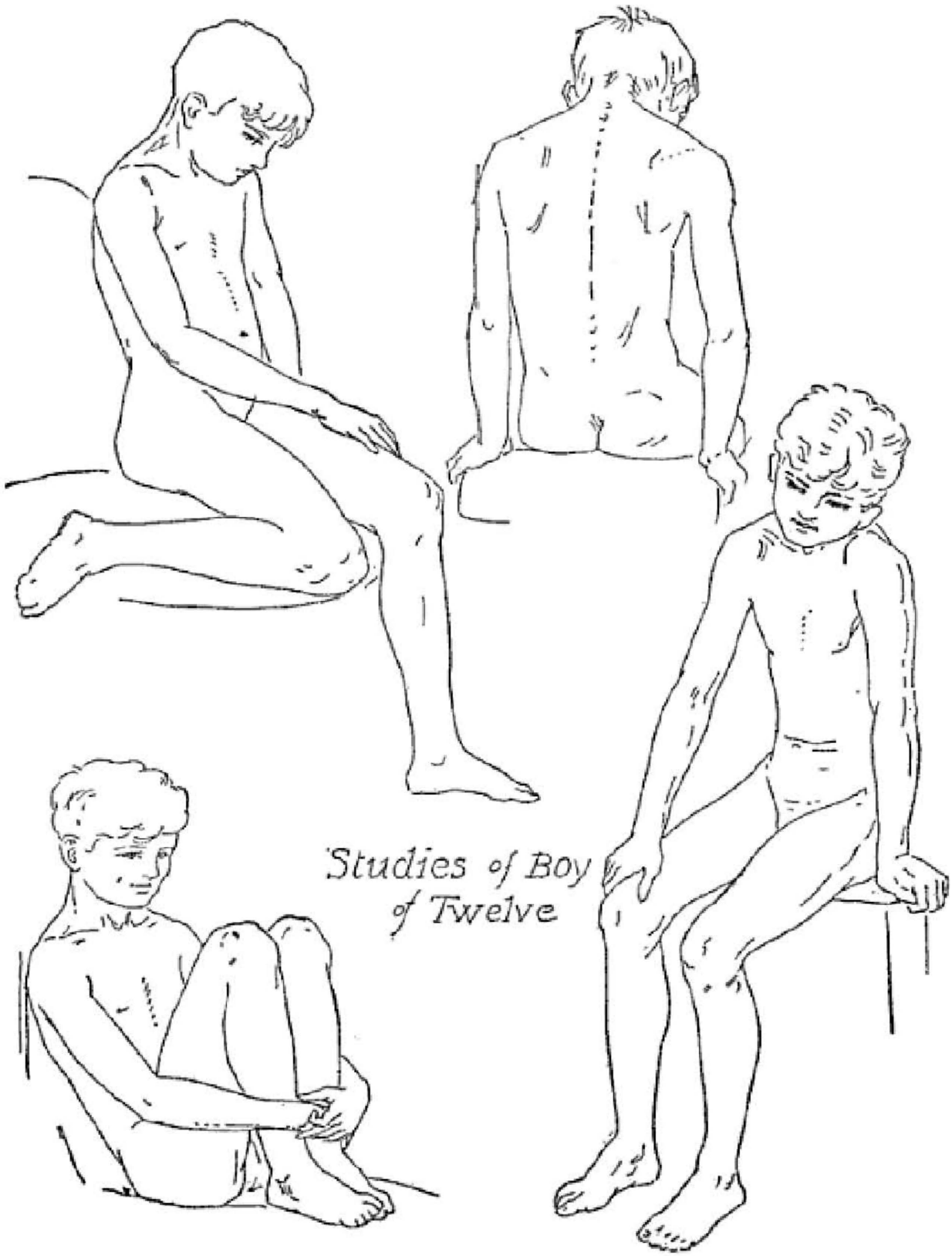

Sketches



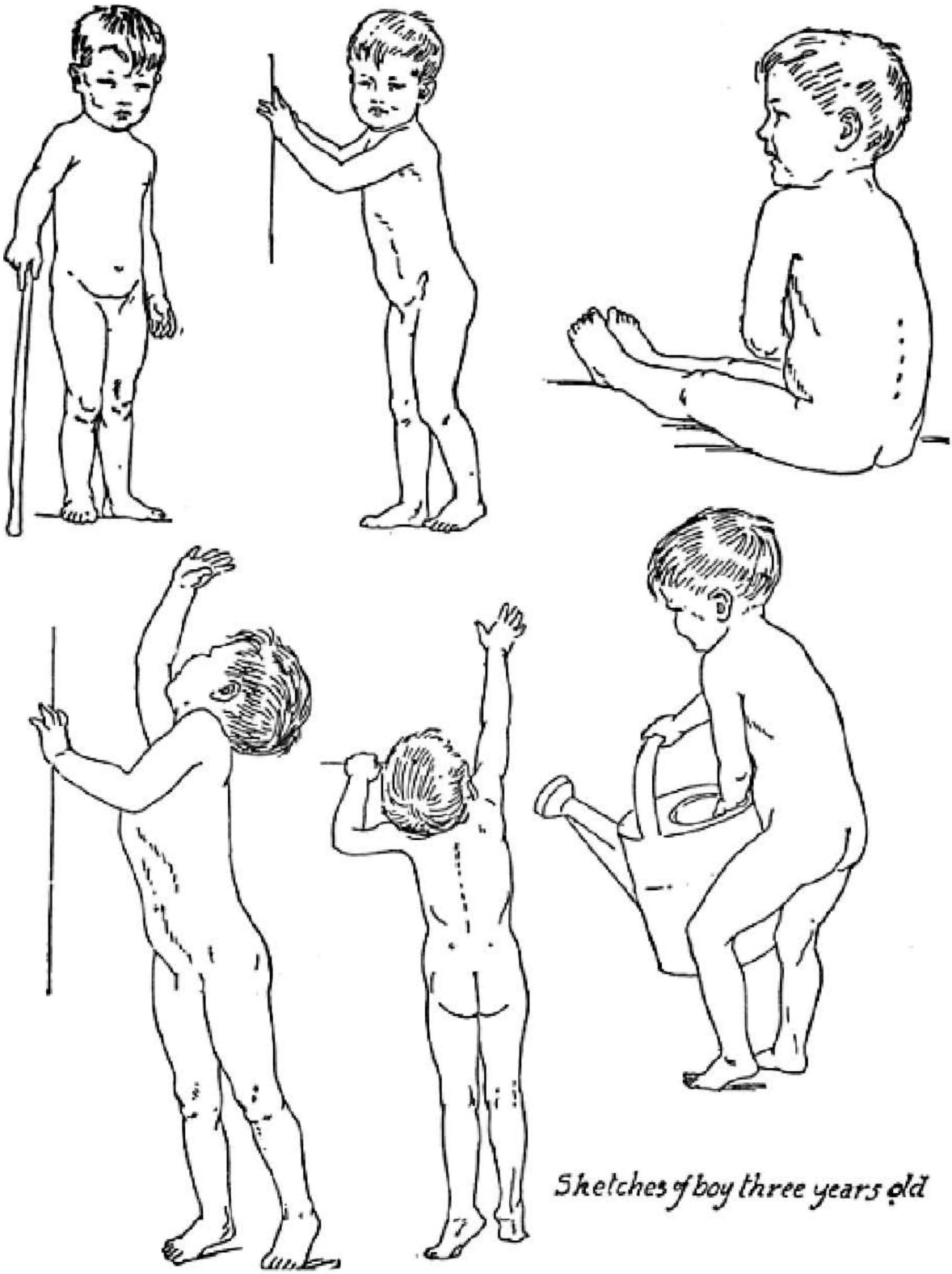


*Twenty-five minute sketches*

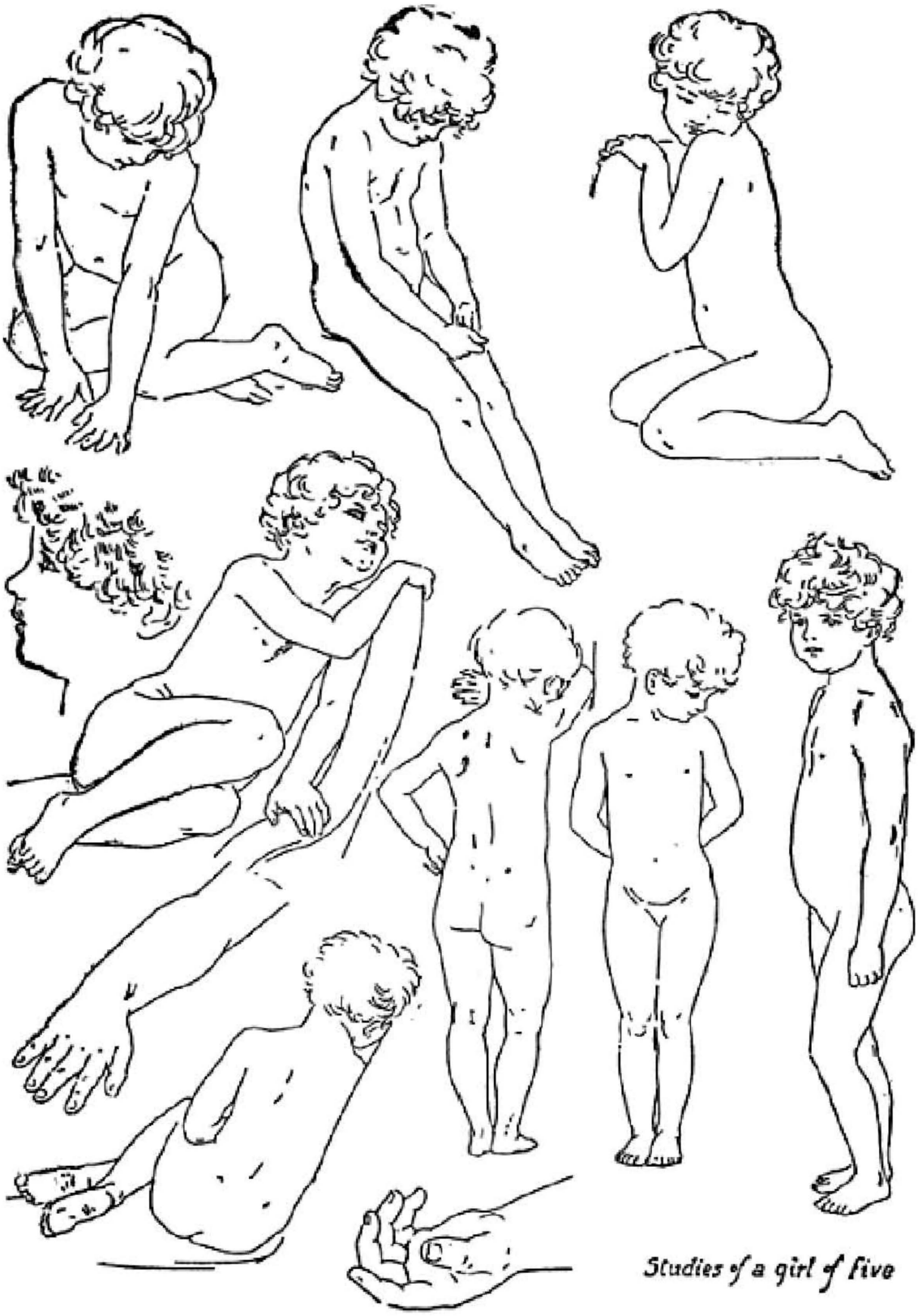




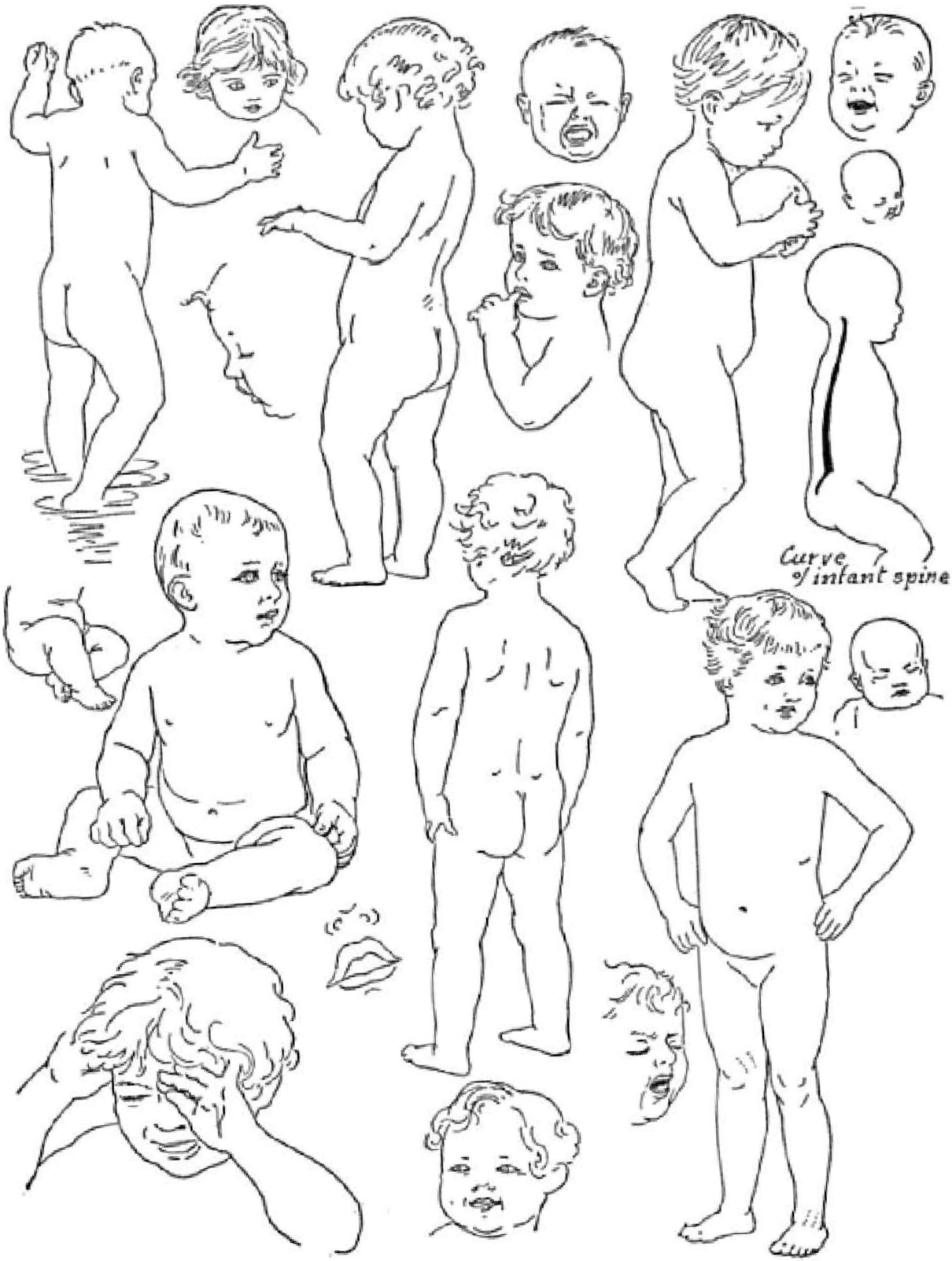
Studies of Boy of Twelve



*Sketches of boy three years old*



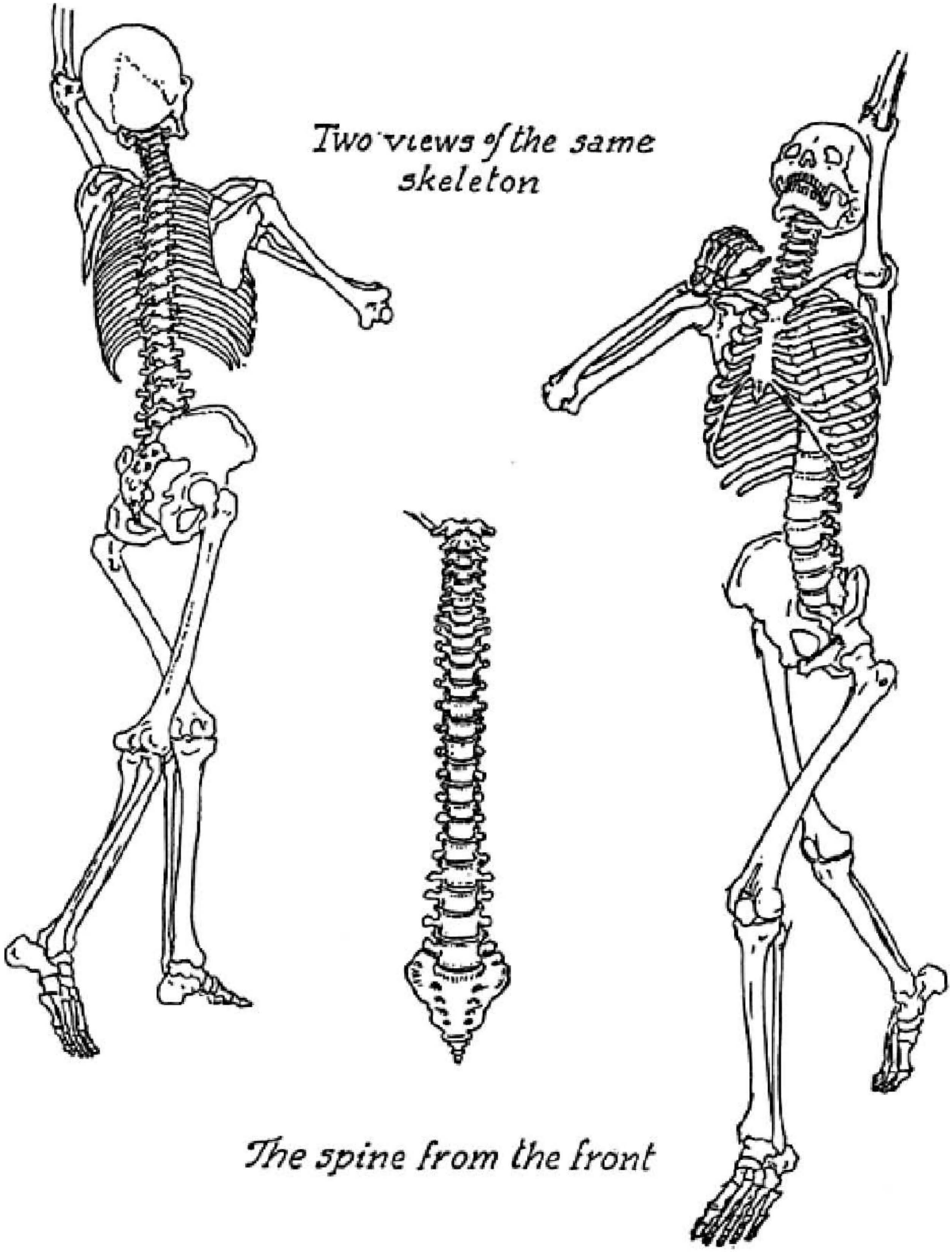
*Studies of a girl of five*


Curve
of infant spine



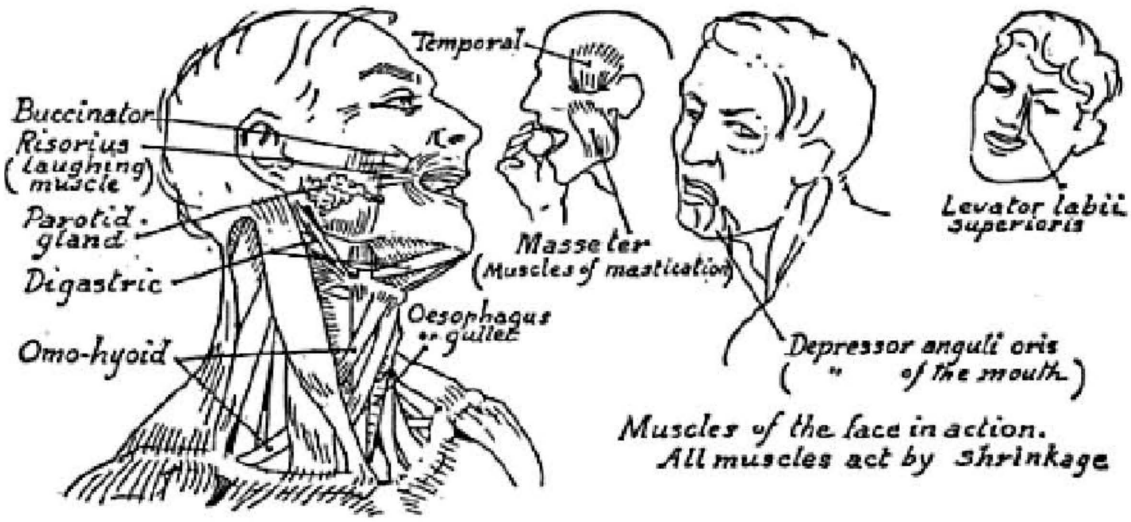
# PART TWO

# THE SKELETON

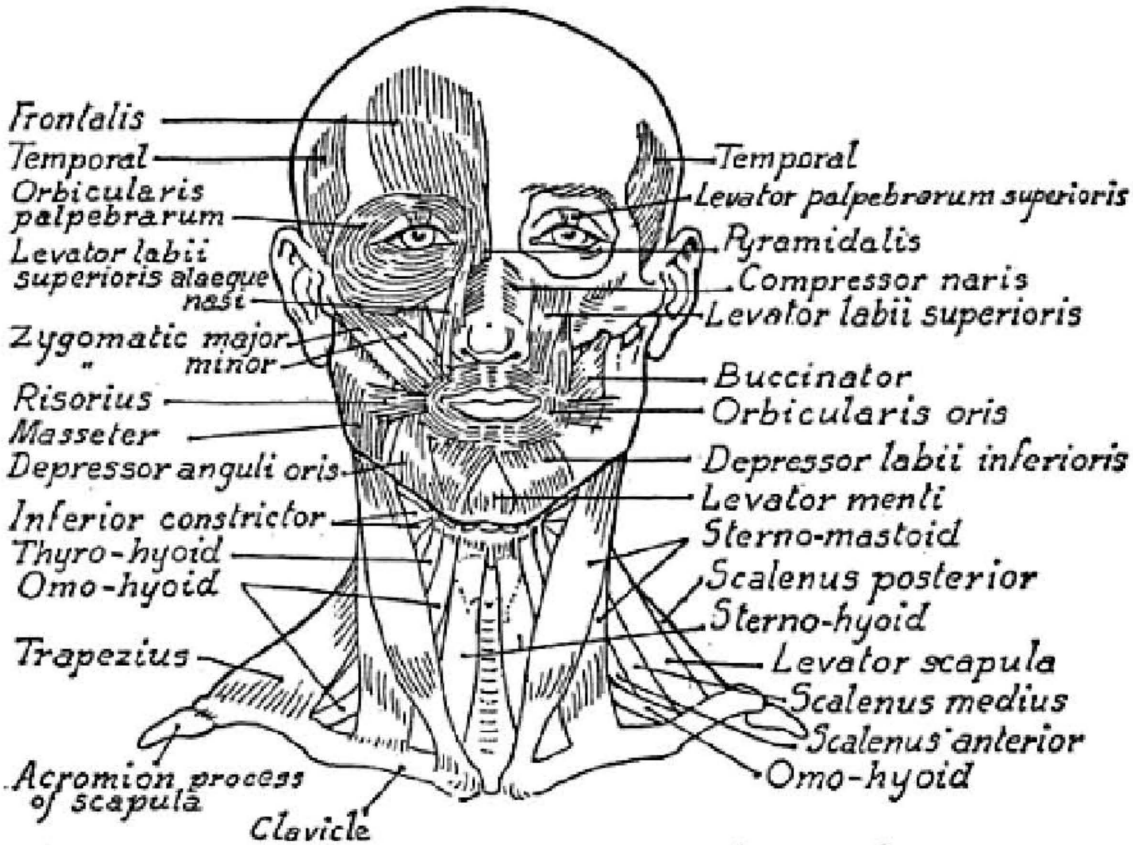


*Two views of the same skeleton*

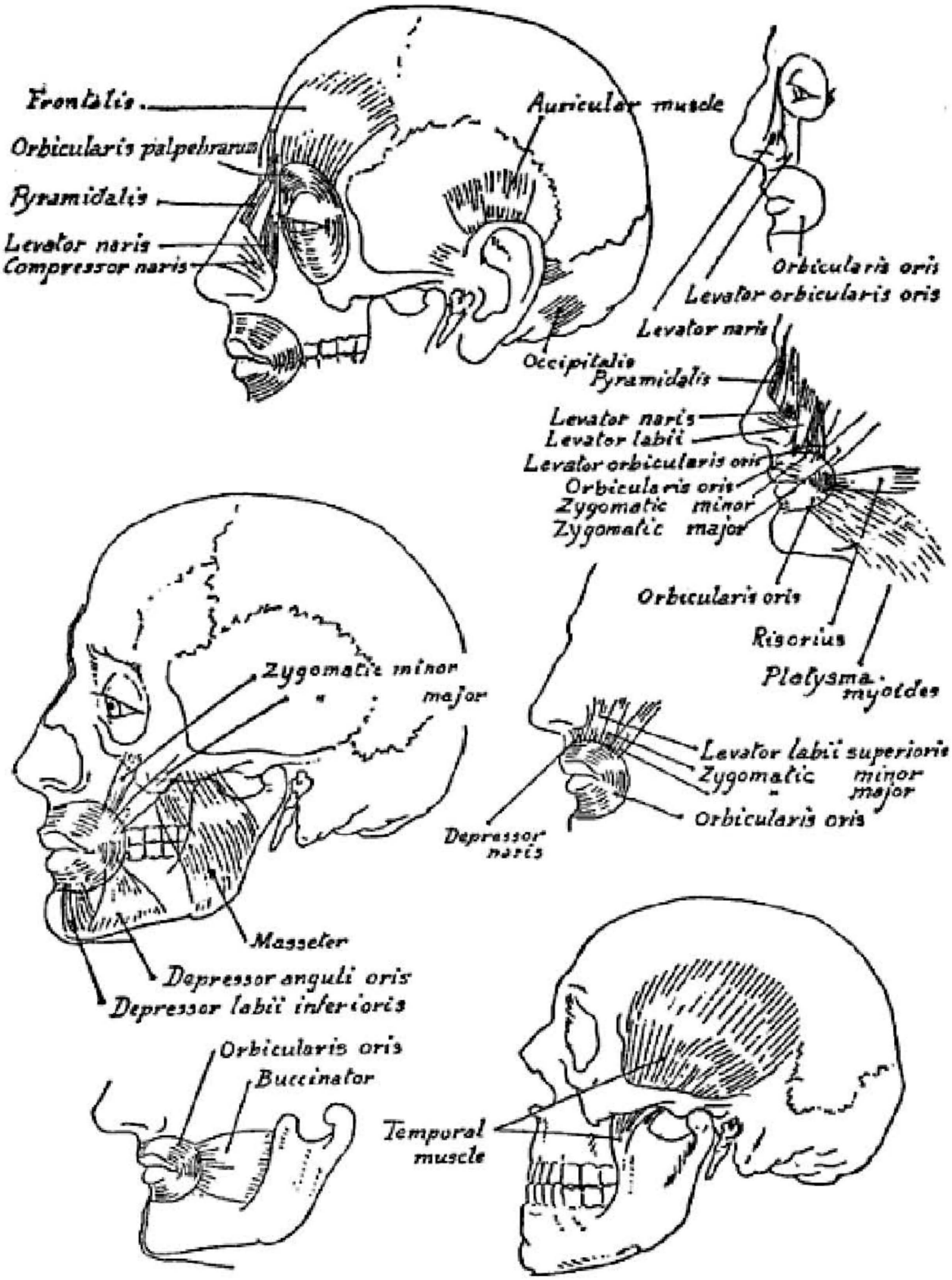
*The spine from the front*

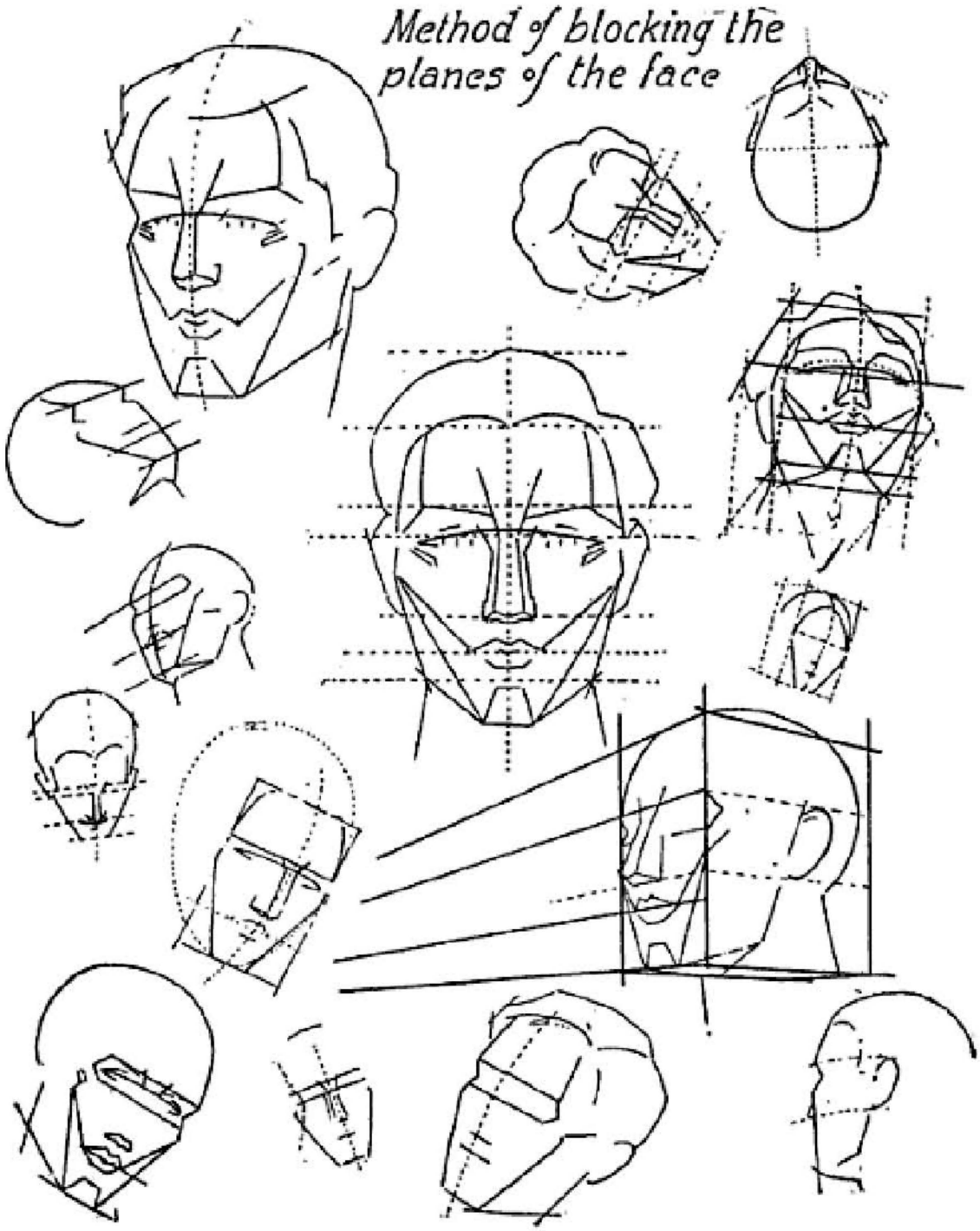


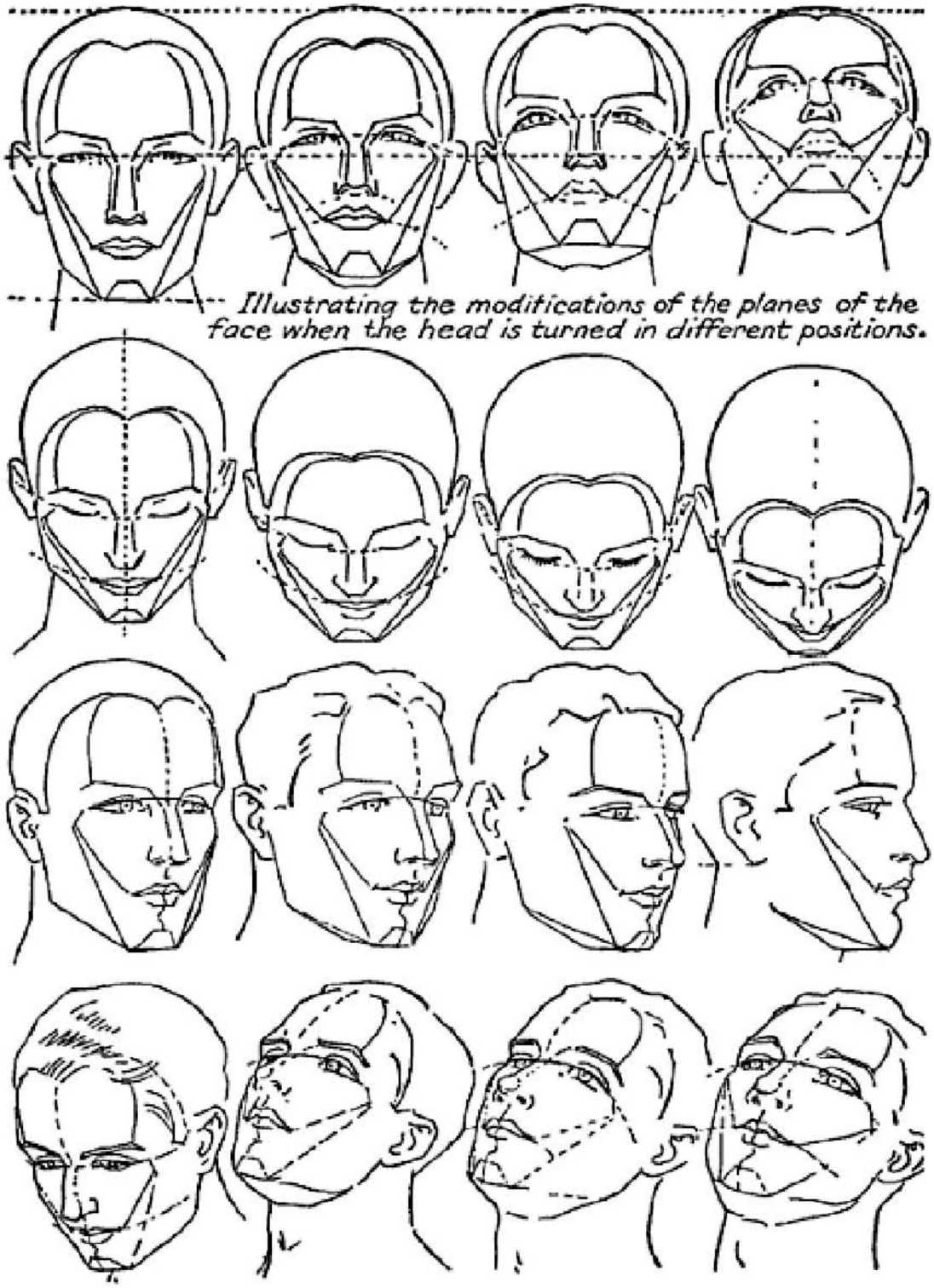

Muscles of the face in action.
All muscles act by shrinkage



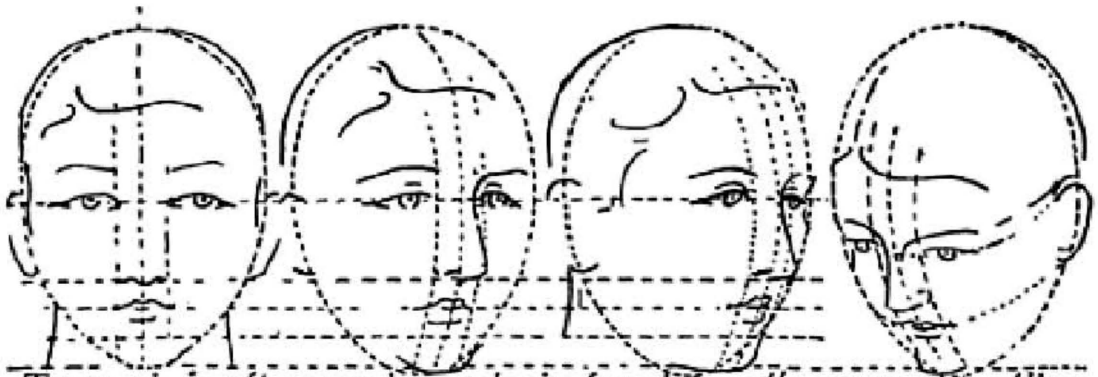

The underlying and the superficial muscles of the face and neck


Frontalis
Orbicularis palpebrarum
Pyramidalis
Levator naris
Compressor naris
Auricular muscle
Occipitalis
Orbicularis oris
Levator orbicularis oris
Levator naris
Pyramidalis
Levator naris
Levator labii
Levator orbicularis oris
Orbicularis oris
Zygomatic minor
Zygomatic major
Orbicularis oris
Risorius
Platysma myoides
Zygomatic minor
major
Levator labii superioris
Zygomatic minor
major
Orbicularis oris
Depressor naris
Masseter
Depressor anguli oris
Depressor labii inferioris
Orbicularis oris
Buccinator
Temporal muscle

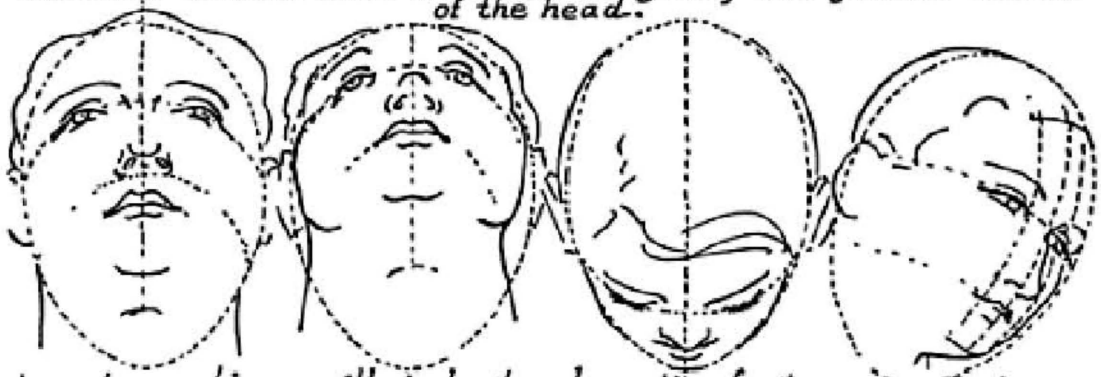

Method of blocking the
planes of the face



*Illustrating the modifications of the planes of the face when the head is turned in different positions.*



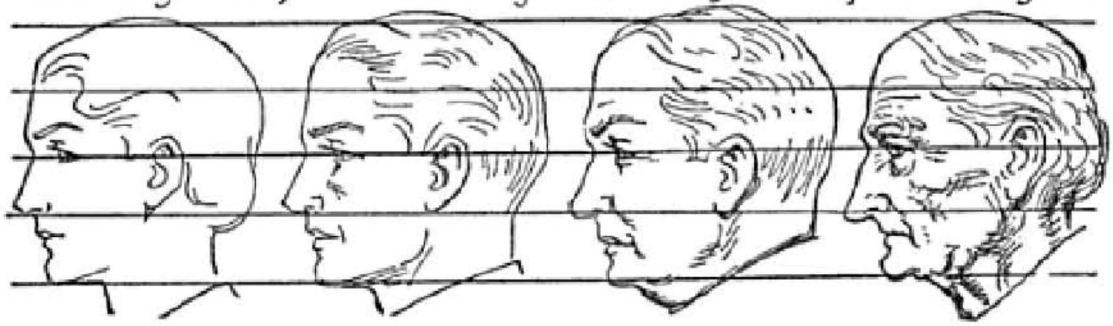
The oval is often used as a basis for giving the general outline of the head.

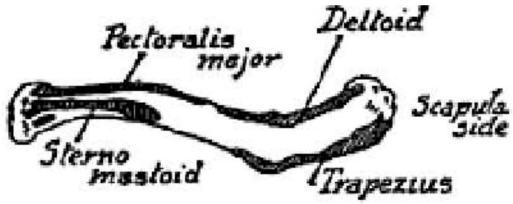


Imaginary lines will help to place the features in their proper relation and to give convexity to the head.

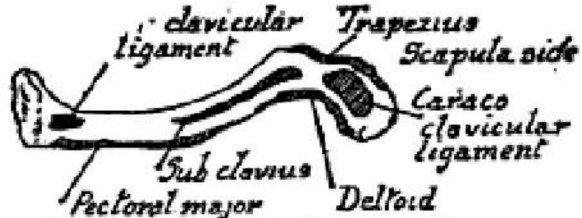


Showing changes in the relative proportions of features and skull at different ages. The nose gradually straightens, then lengthens, the ears lengthen, the eyes are placed higher.

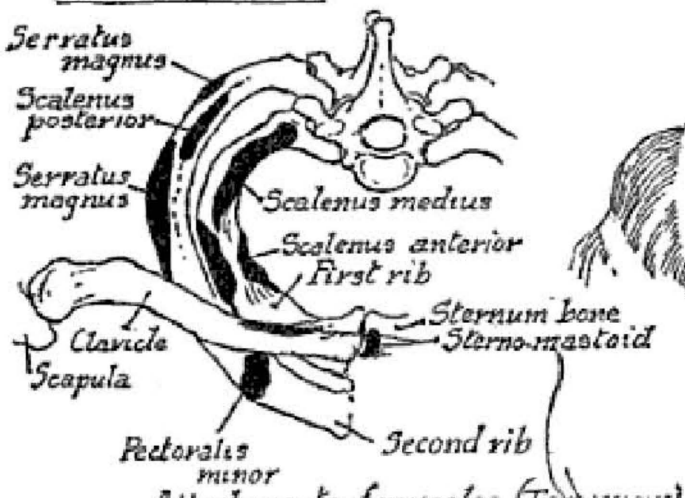




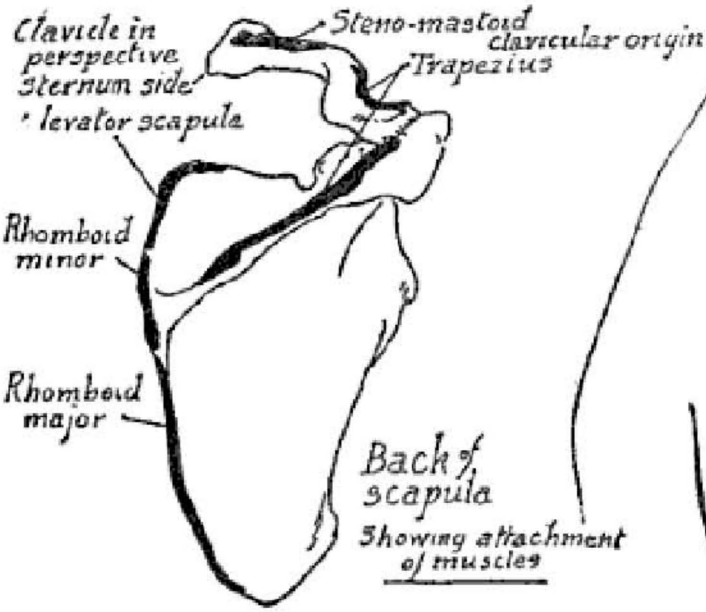

Attachment of muscles on upper surface of clavicle




Attachment of muscles on under surface of clavicle



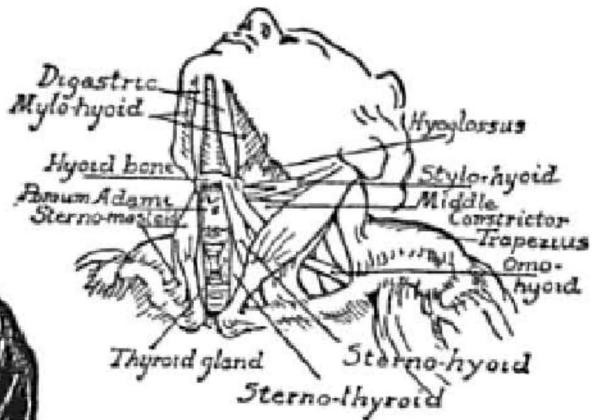

Attachments of muscles (Top view)




Back of scapula showing attachment of muscles



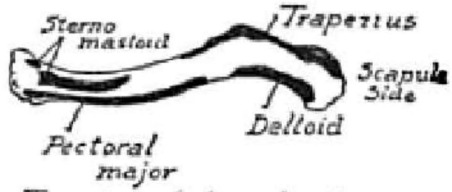




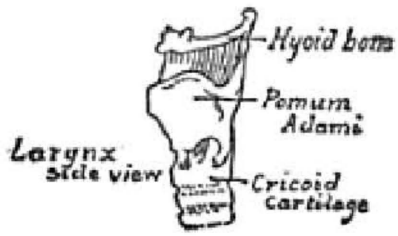


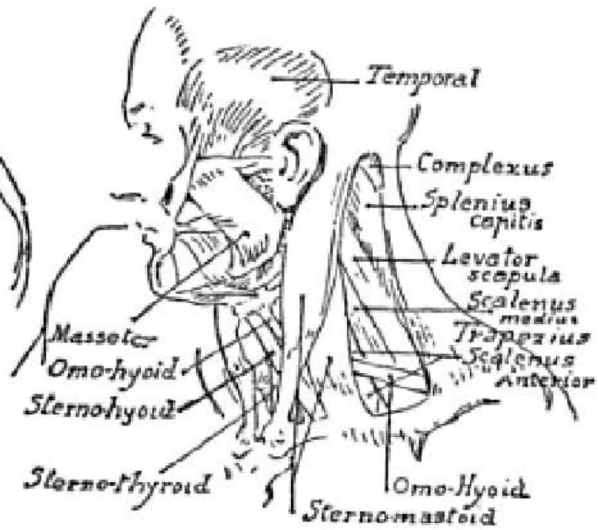


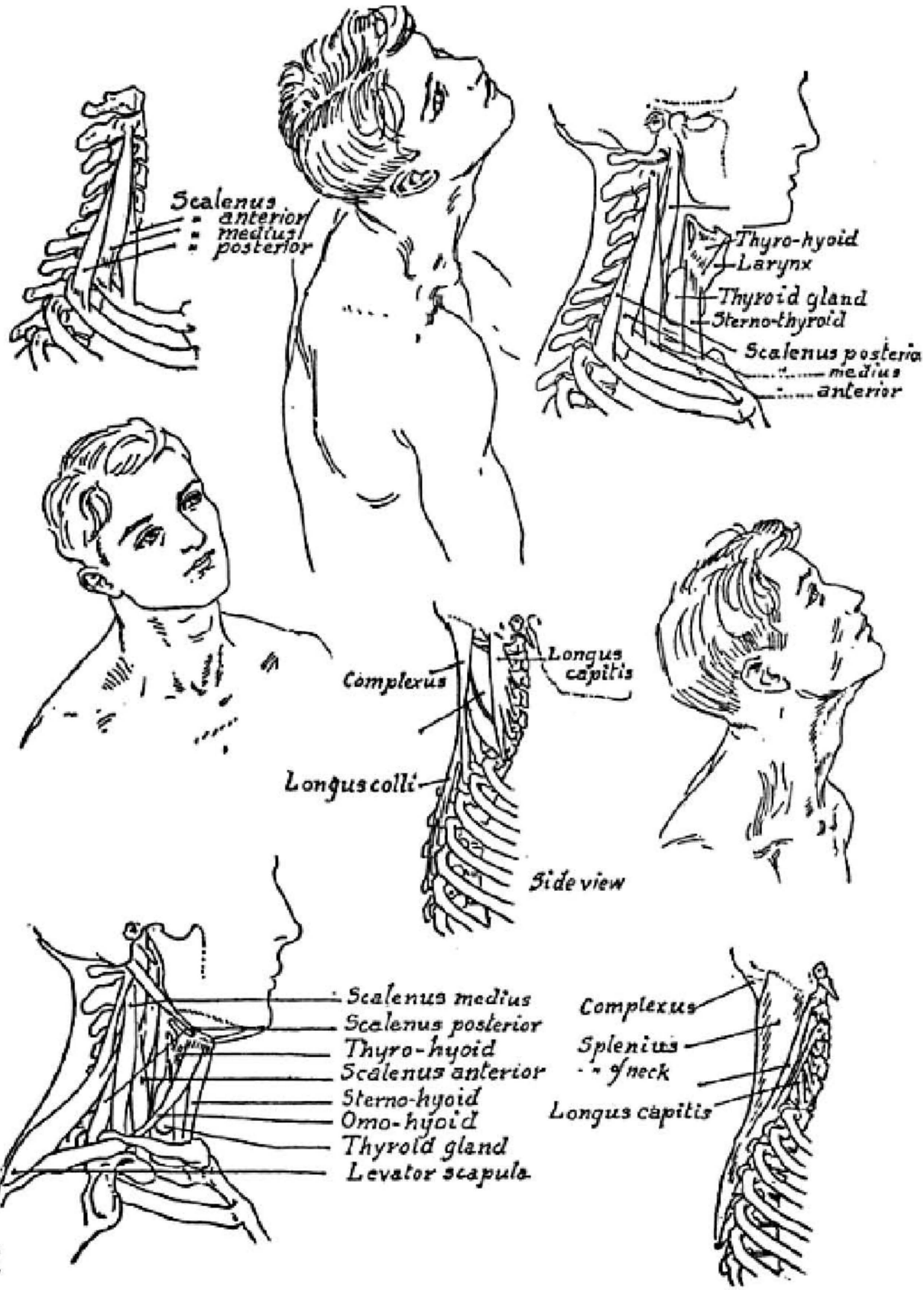


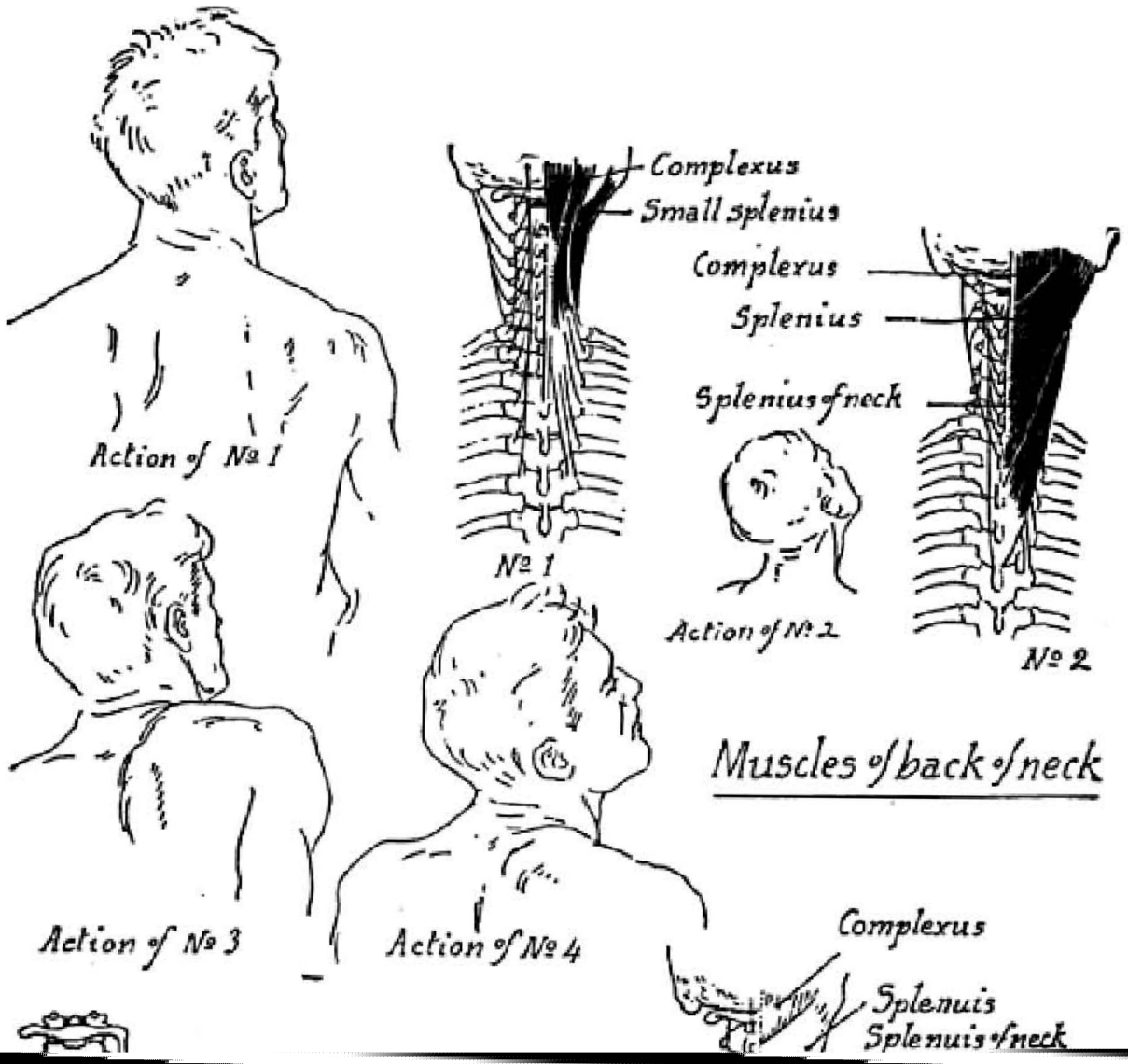



Top view of clavicle showing attachment of muscles




Scalenus
anterior
medius
posterior
Thyro-hyoid
Larynx
Thyroid gland
Sterno-thyroid
Scalenus posterior
medius
anterior
Complexus
Longus capitis
Longus colli
Side view
Scalenus medius
Scalenus posterior
Thyro-hyoid
Scalenus anterior
Sterno-hyoid
Omo-hyoid
Thyroid gland
Levator scapula
Complexus
Splenius of neck
Longus capitis


Complexus
Small splenius
Complexus
Splenius
Splenius of neck
Action of № 1
№ 1
Action of № 2
№ 2
Muscles of back of neck
Action of № 3
Action of № 4
Complexus
Splenuis
Splenuis of neck

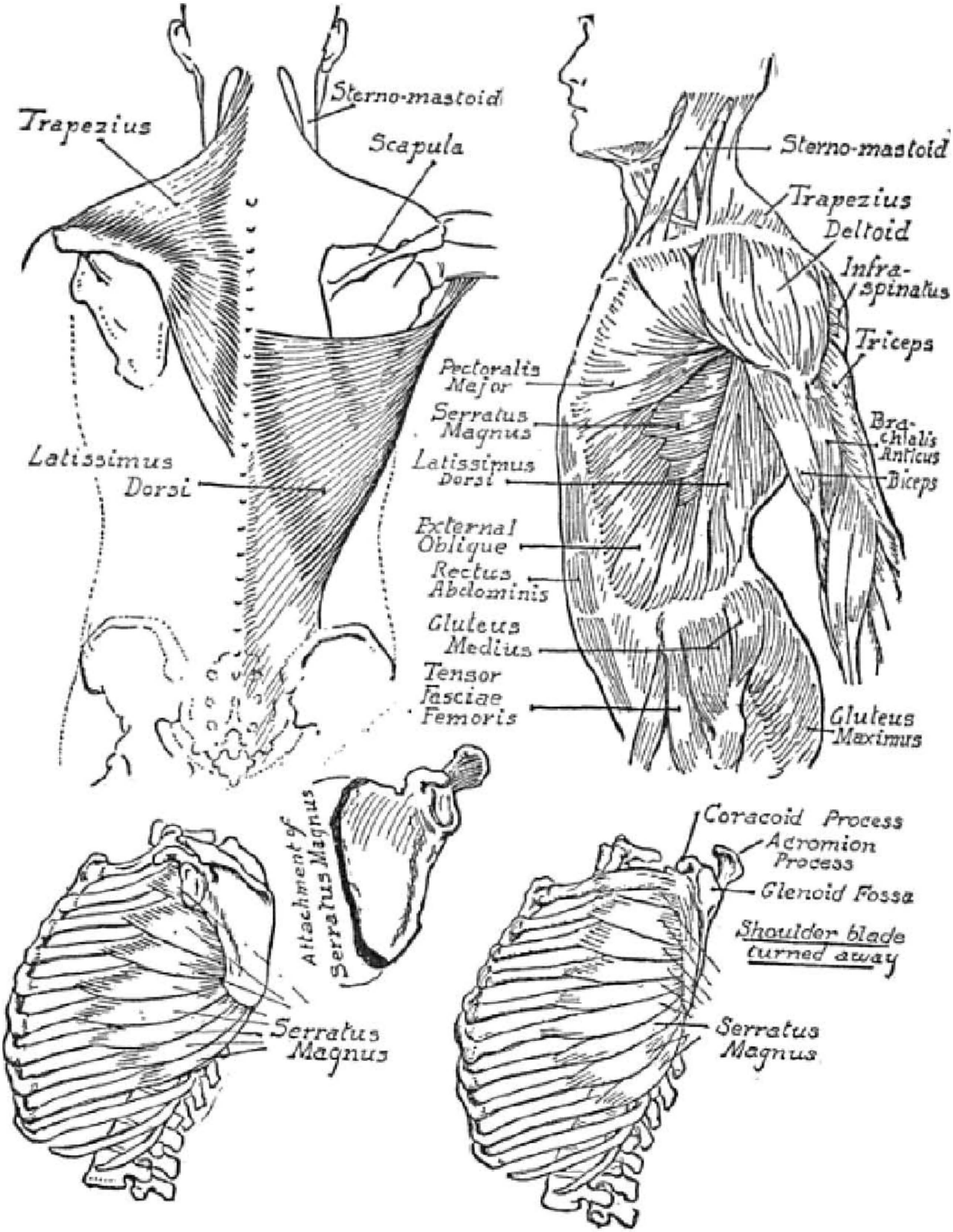


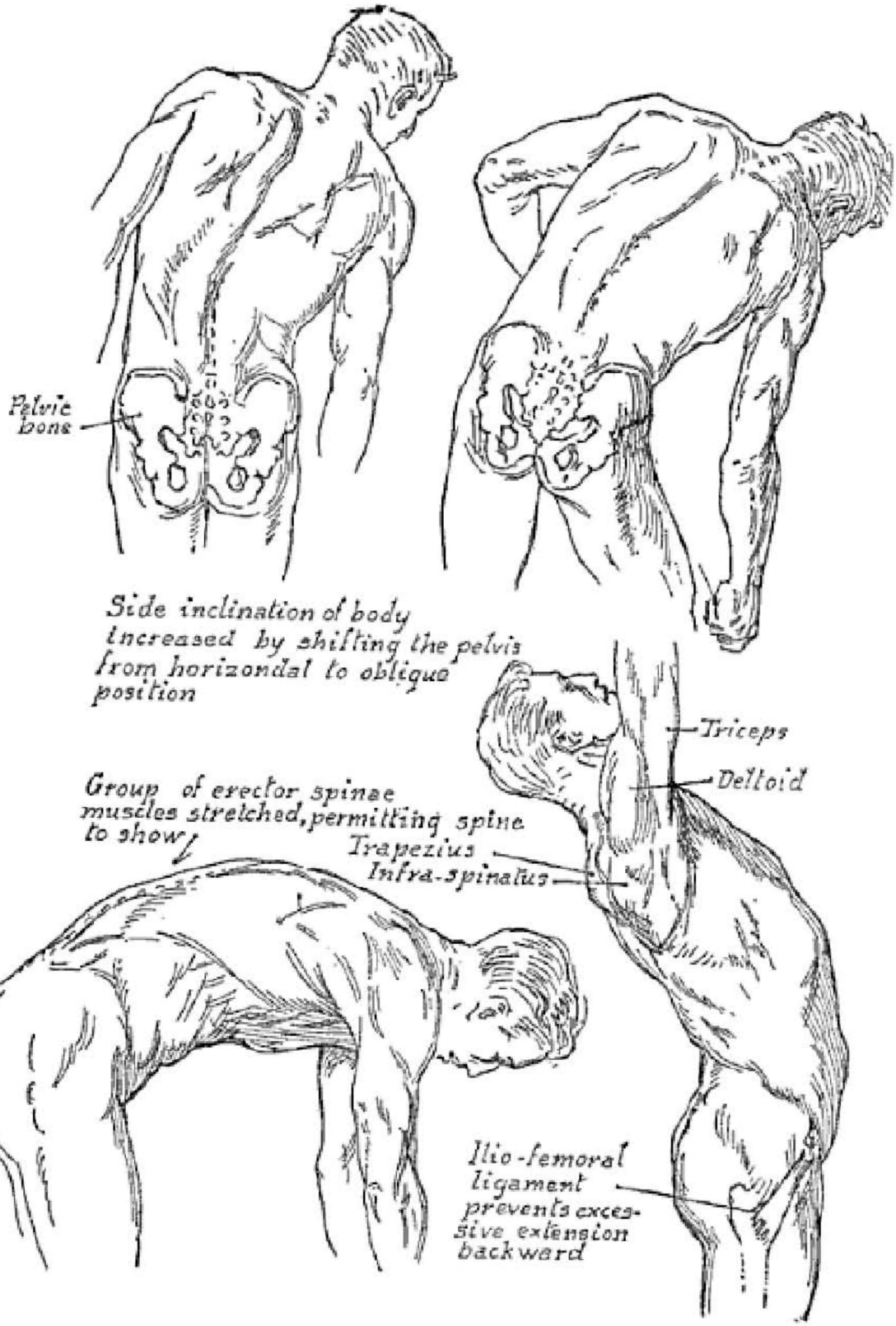
Studies of Expression

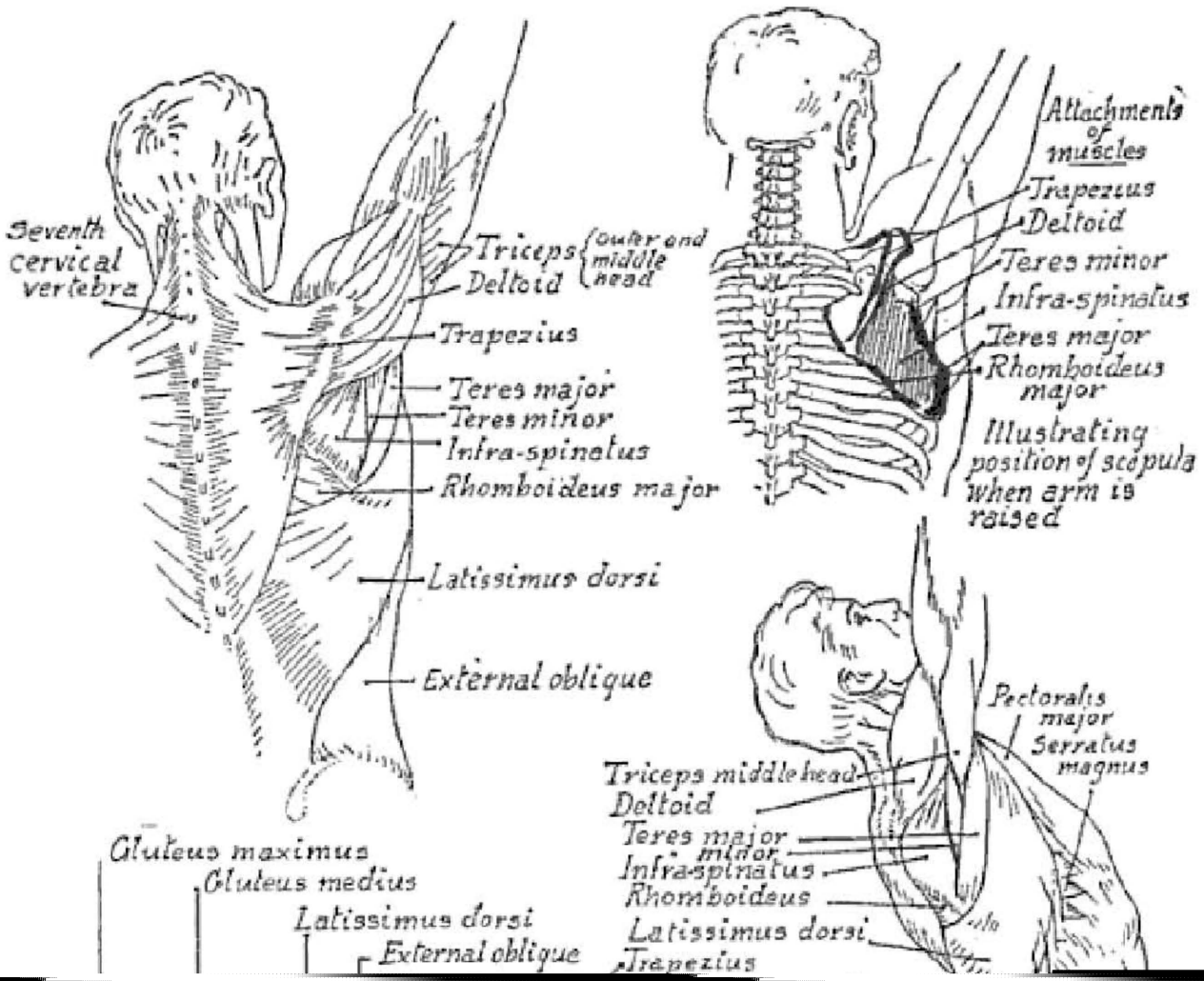


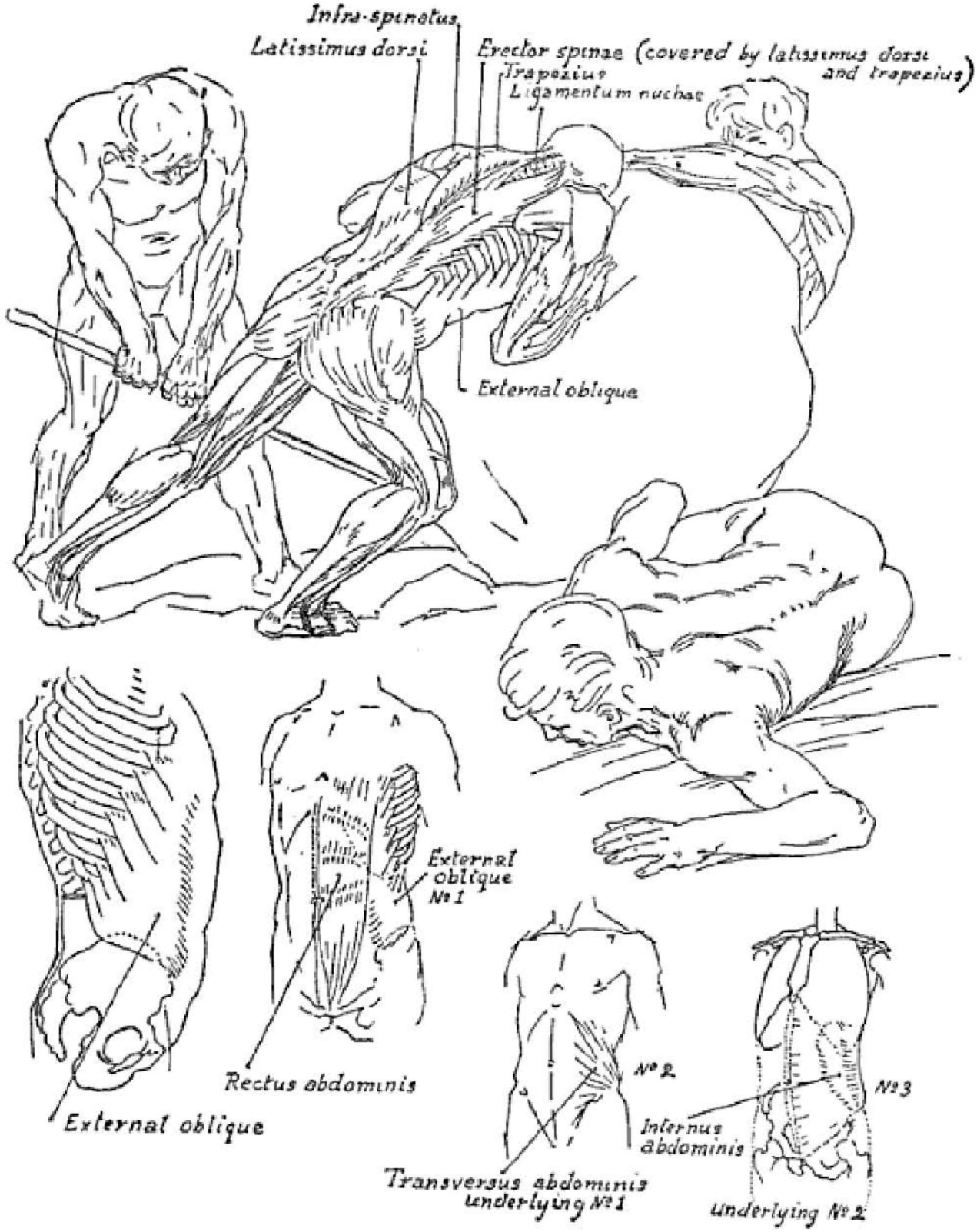
# PART FOUR

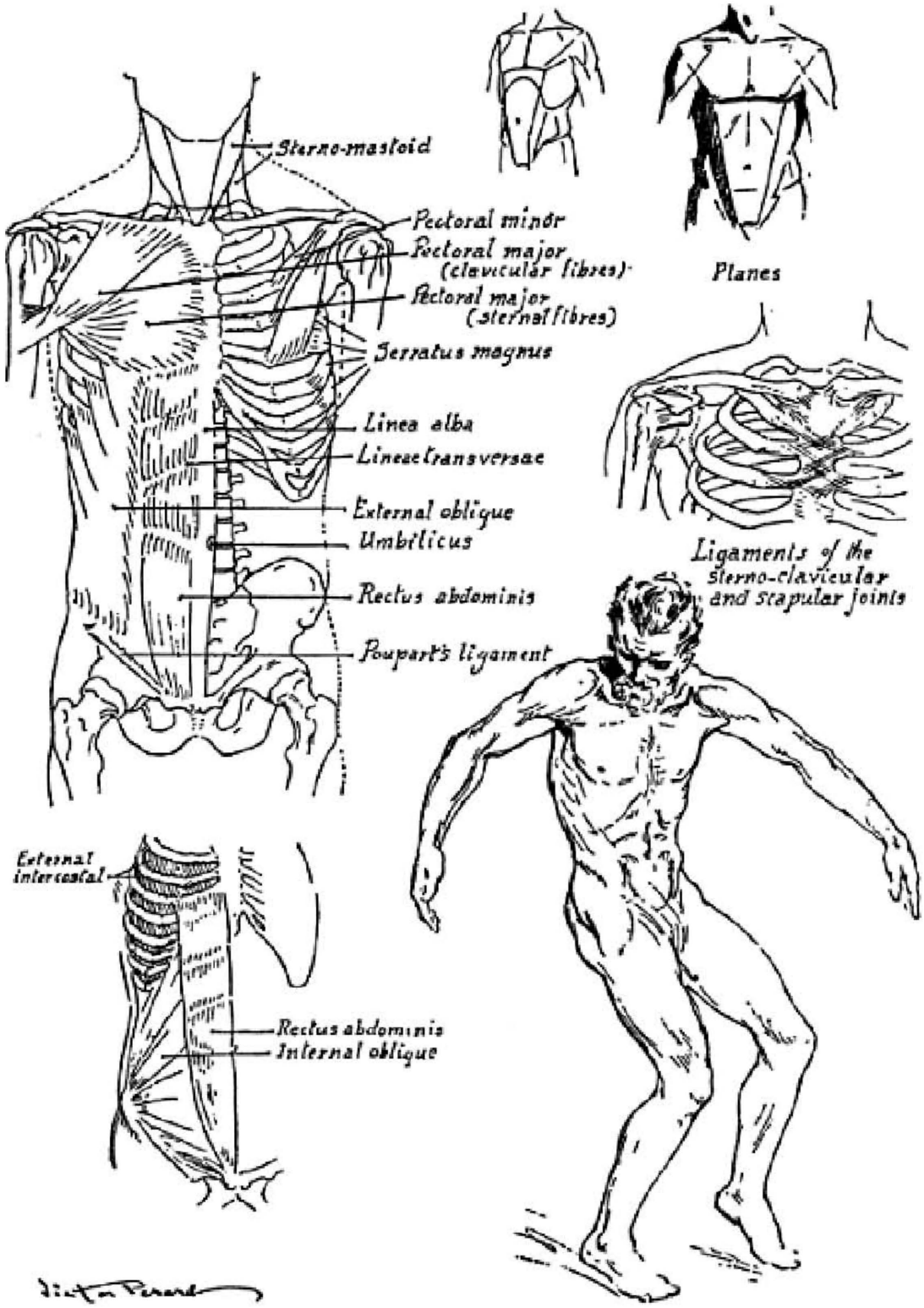
# THE TORSO

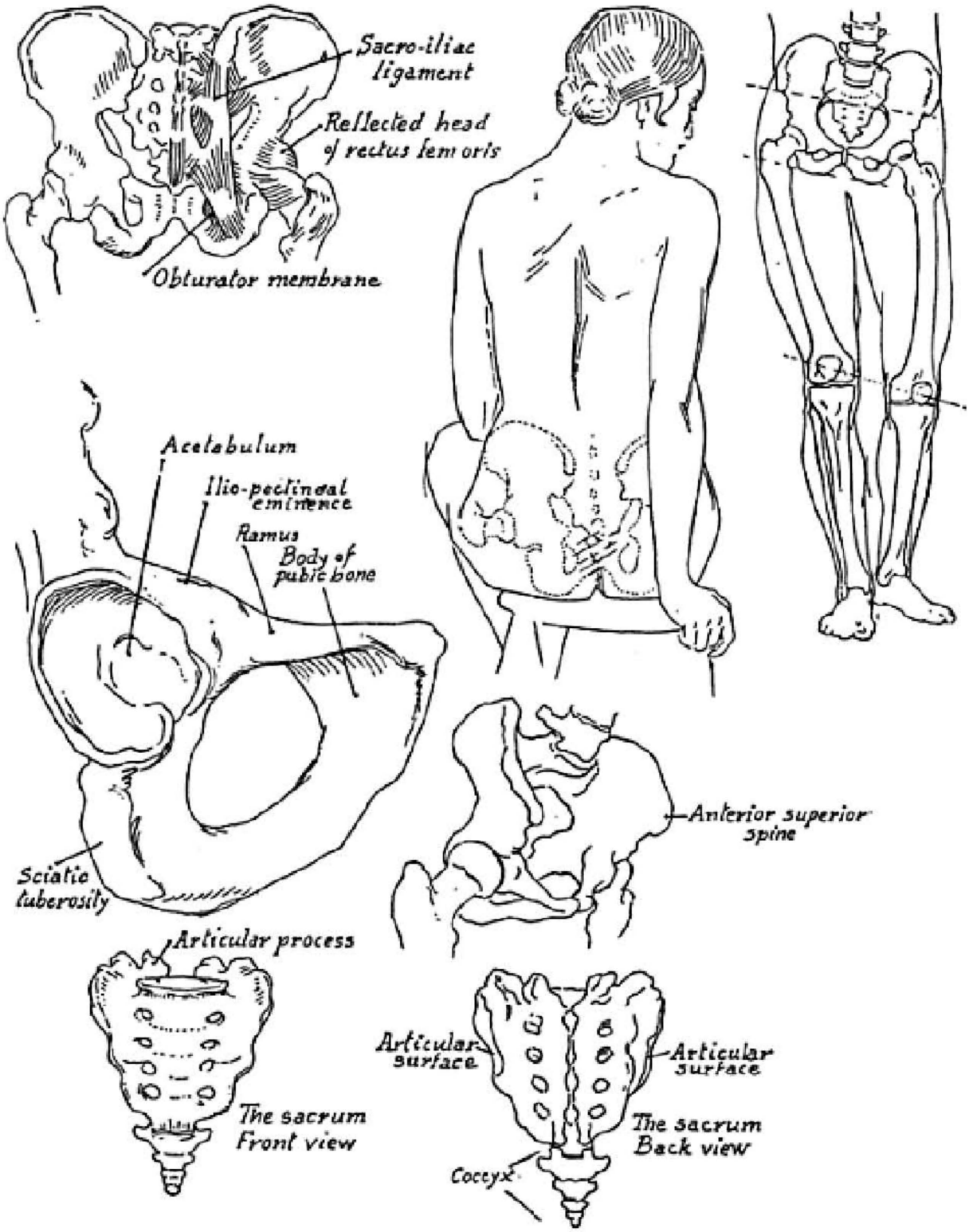

Trapezius
Sterno-mastoid
Scapula
Latissimus
Dorsi
Sterno-mastoid
Trapezius
Deltoid
Infra-
spinatus
Triceps
Pectoralis
Major
Serratus
Magnus
Latissimus
Dorsi
Brachialis
Anticus
Biceps
External
Oblique
Rectus
Abdominis
Gluteus
Medius
Tensor
Fasciae
Femoris
Gluteus
Maximus
Attachment of
Serratus Magnus
Serratus
Magnus
Coracoid Process
Acromion
Process
Glenoid Fossa
Shoulder blade
turned away
Serratus
Magnus

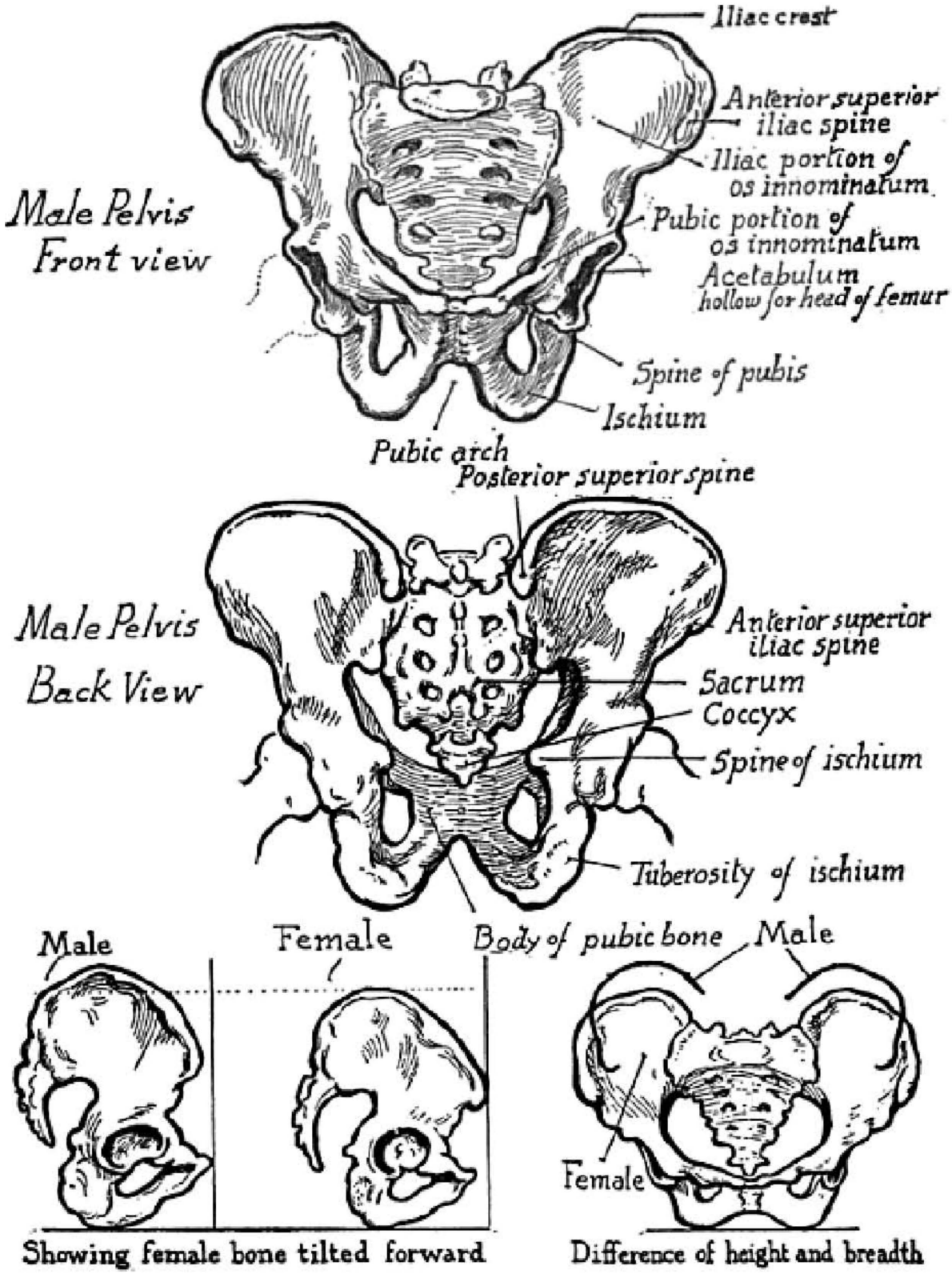

Pelvic bone
Side inclination of body increased by shifting the pelvis from horizontal to oblique position
Triceps
Deltoid
Group of erector spinae muscles stretched, permitting spine to show
Trapezius
Infra-spinatus
Ilio-femoral ligament prevents excessive extension backward

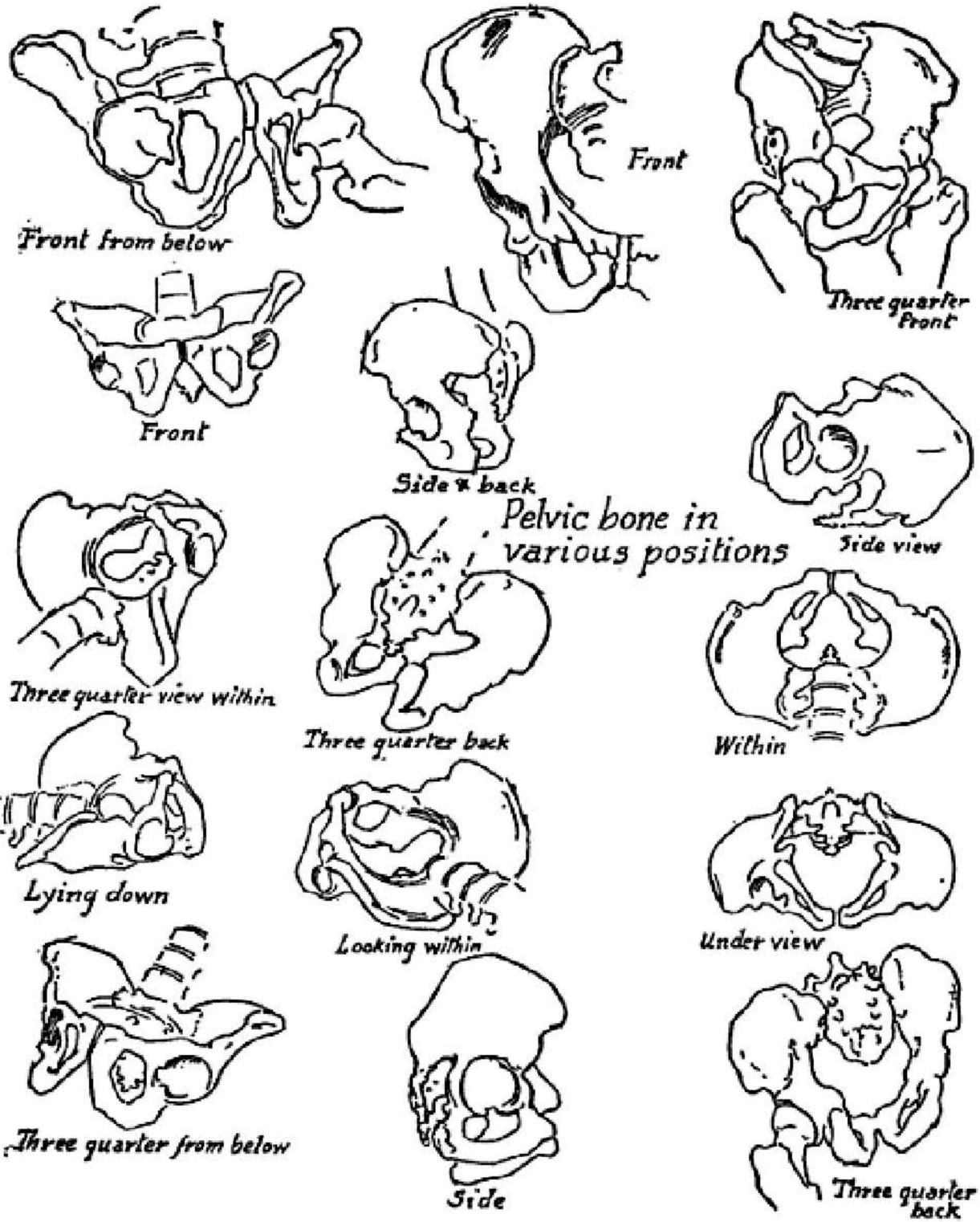

Seventh cervical vertebra
Triceps (outer and middle head)
Deltoid
Trapezius
Teres major
Teres minor
Infra-spinatus
Rhomboideus major
Latissimus dorsi
External oblique
Attachments of muscles
Trapezius
Deltoid
Teres minor
Infra-spinatus
Teres major
Rhomboideus major
Illustrating position of scapula when arm is raised
Pectoralis major
Serratus magnus
Triceps middle head
Deltoid
Teres major
Teres minor
Infra-spinatus
Rhomboideus
Latissimus dorsi
Trapezius
Gluteus maximus
Gluteus medius
Latissimus dorsi
External oblique

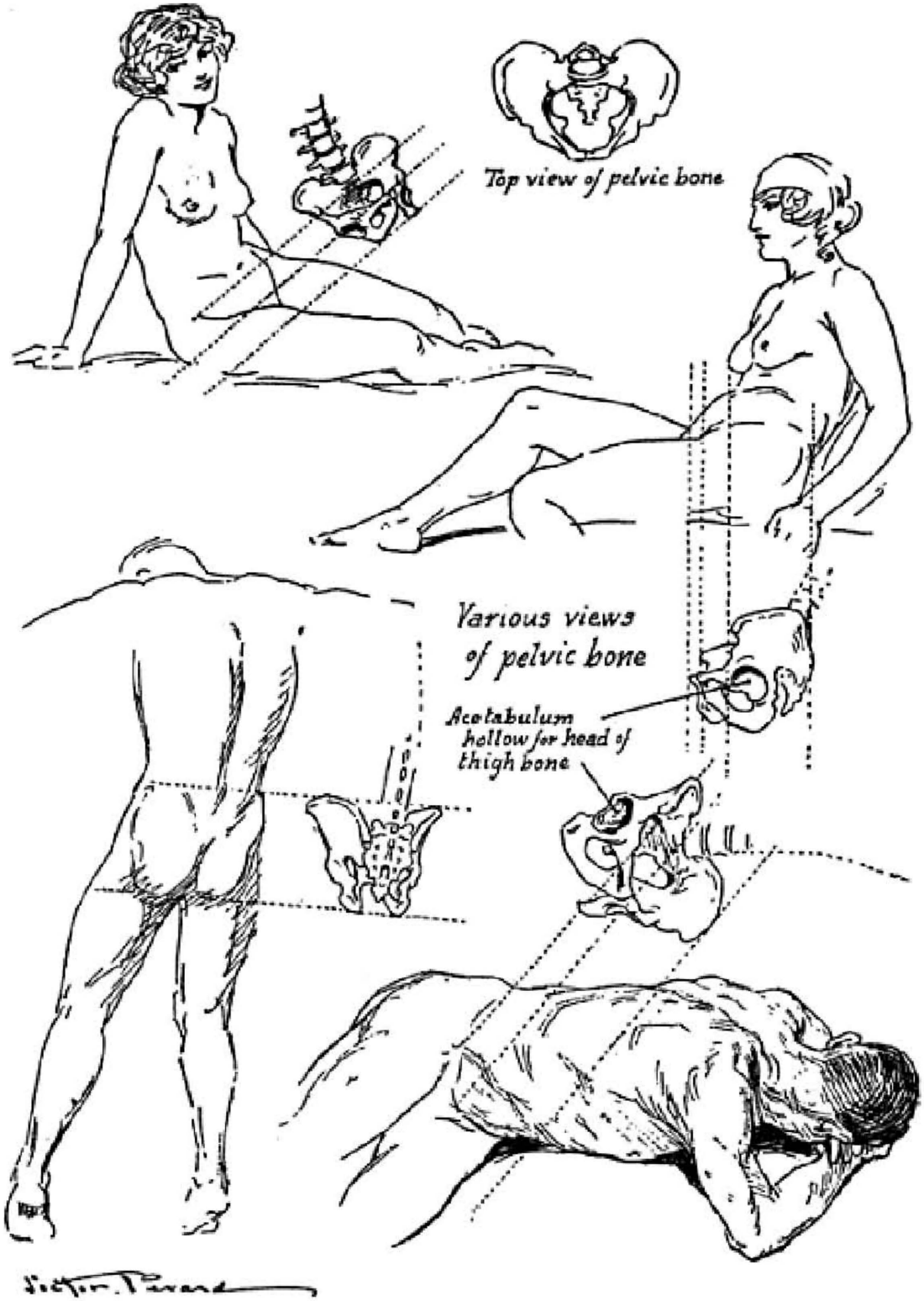

Infra-spinatus
Latissimus dorsi
Erector spinae (covered by latissimus dorsi and trapezius)
Trapezius
Ligamentum nuchae
External oblique
External oblique
No 1
Rectus abdominis
External oblique
No 2
Internus abdominis
Transversus abdominis underlying No 1
No 3
Underlying No 2

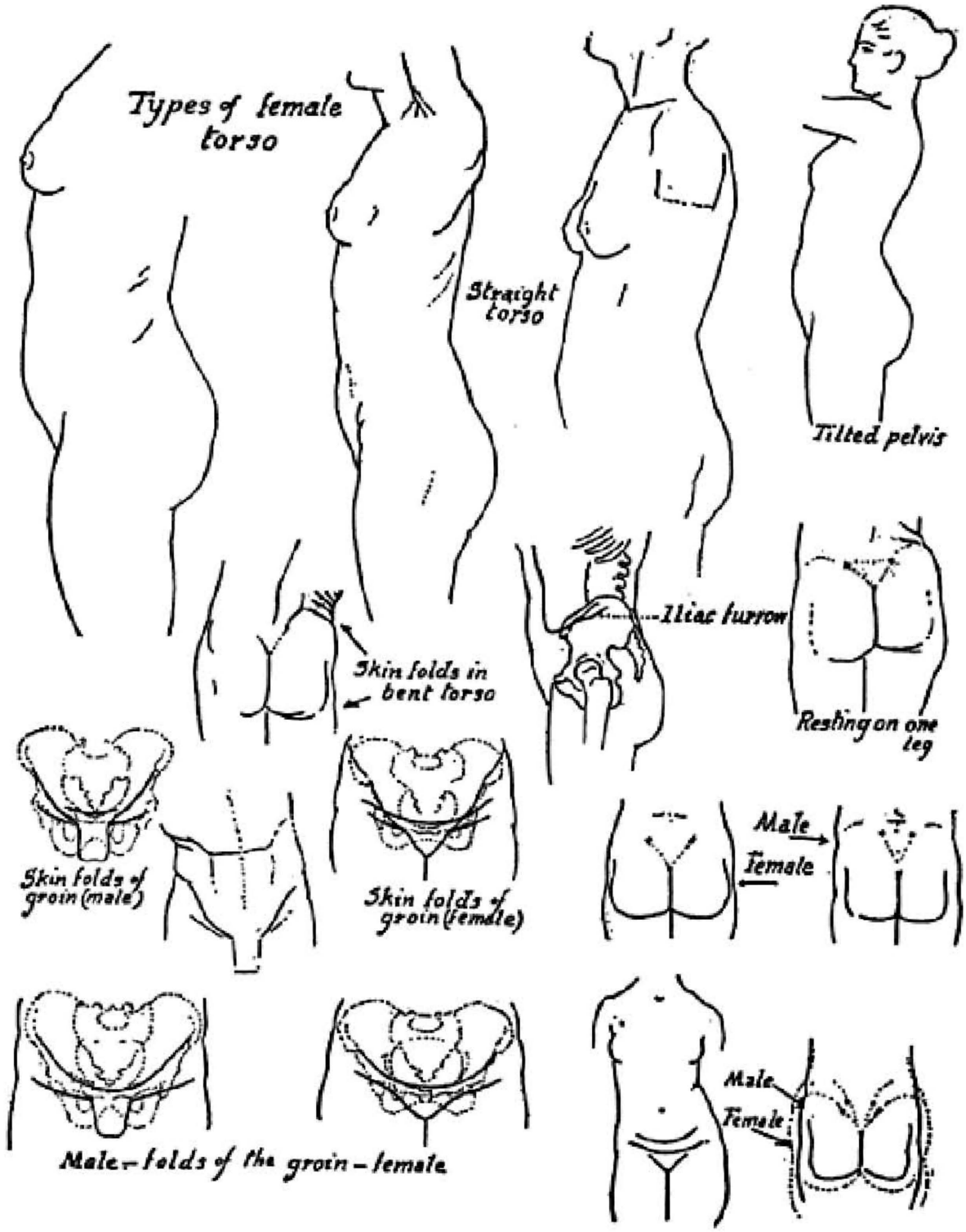

Sterno-mastoid
Pectoral minor
Pectoral major (clavicular fibres)
Pectoral major (sternal fibres)
Serratus magnus
Linea alba
Lineae transversae
External oblique
Umbilicus
Rectus abdominis
Poupart's ligament
External intercostal
Rectus abdominis
Internal oblique
Planes
Ligaments of the sterno-clavicular and scapular joints

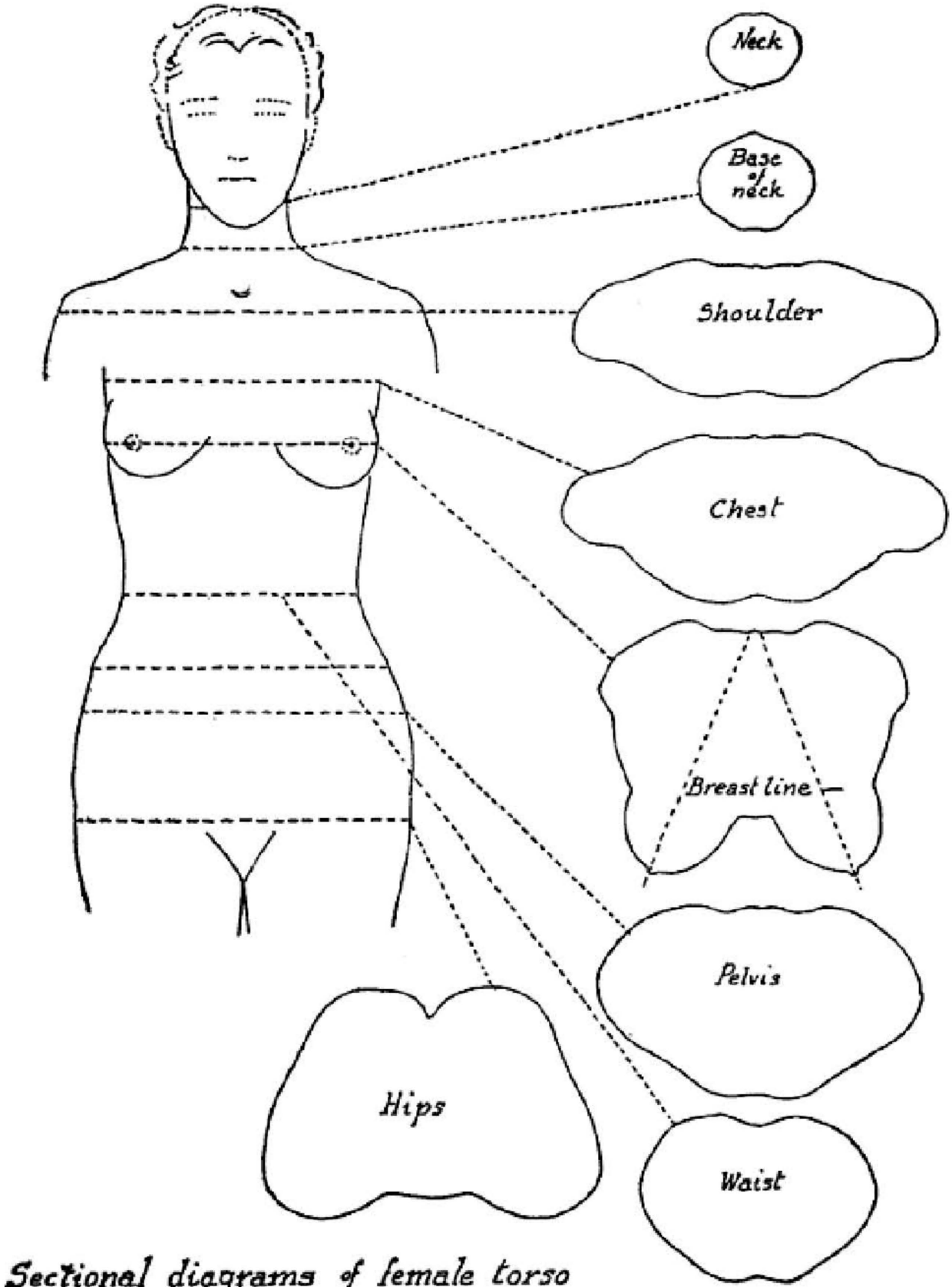

Sacro-iliac ligament
Reflected head of rectus femoris
Obturator membrane
Acetabulum
Ilio-pectineal eminence
Ramus
Body of pubic bone
Sciatic tuberosity
Anterior superior spine
Articular process
The sacrum Front view
Articular surface
Articular surface
The sacrum Back view
Coccyx


Male Pelvis
Front view
Iliac crest
Anterior superior iliac spine
Iliac portion of os innominatum
Pubic portion of os innominatum
Acetabulum hollow for head of femur
Spine of pubis
Ischium
Pubic arch
Male Pelvis
Back View
Posterior superior spine
Anterior superior iliac spine
Sacrum
Coccyx
Spine of ischium
Tuberosity of ischium
Male
Female
Body of pubic bone
Male
Female
Showing female bone tilted forward
Difference of height and breadth

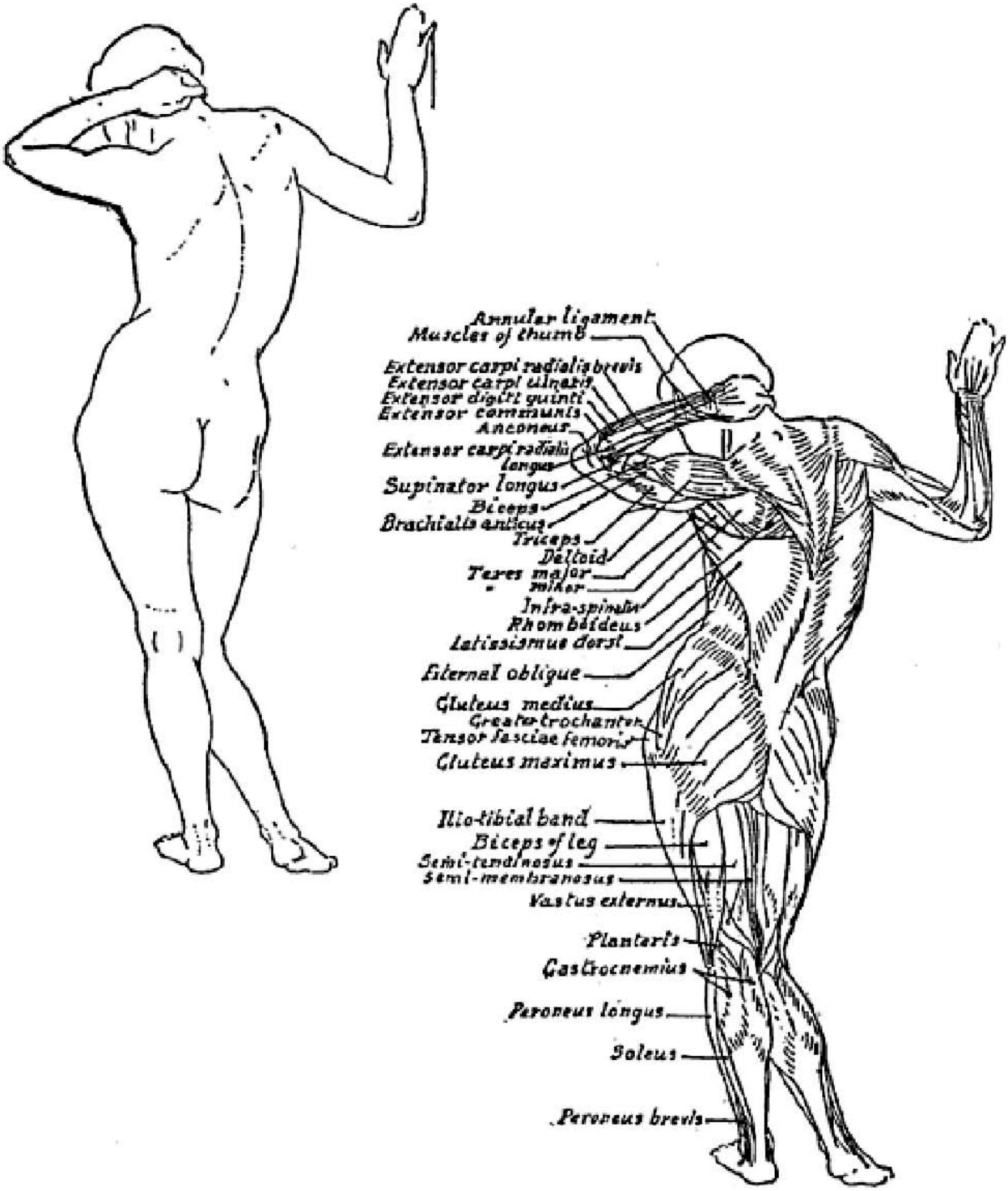

Front from below
Front
Three quarter Front
Front
Side & back
Side view
Pelvic bone in various positions
Three quarter view within
Three quarter back
Within
Lying down
Looking within
Under view
Three quarter from below
Side
Three quarter back

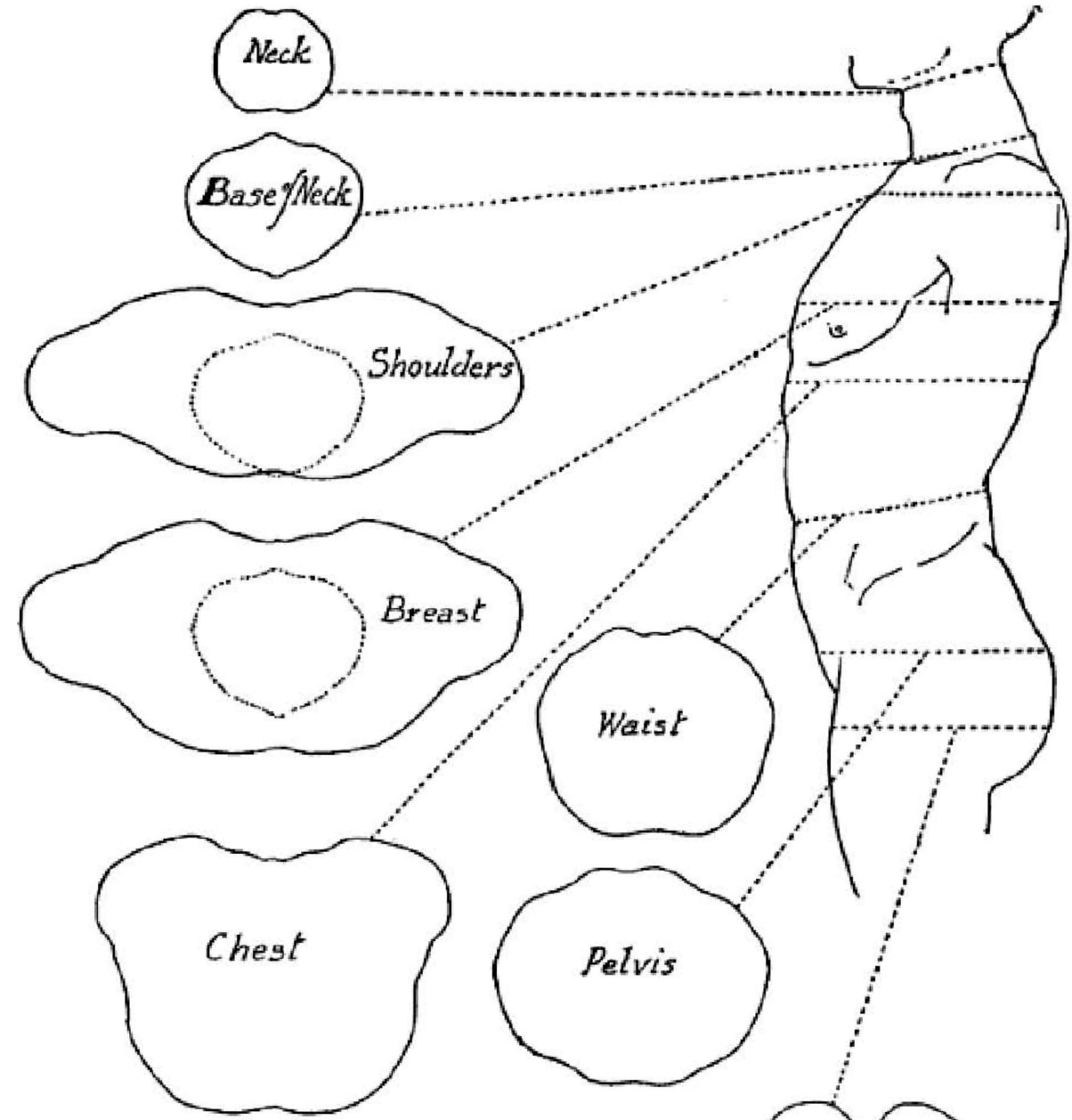

Top view of pelvic bone
Various views of pelvic bone
Acetabulum hollow for head of thigh bone


Types of female torso
Straight torso
Tilted pelvis
Iliac furrow
Skin folds in bent torso
Resting on one leg
Skin folds of groin (male)
Skin folds of groin (female)
Male
Female
Male
Female
Male - folds of the groin - female




*Sectional diagrams of female torso*


Annular ligament
Muscles of thumb
Extensor carpi radialis brevis
Extensor carpi ulnaris
Extensor digiti quinti
Extensor communis
Anconeus
Extensor carpi radialis longus
Supinator longus
Biceps
Brachialis anticus
Triceps
Deltoid
Teres major
Infra-spinatus
Rhomboideus
Latissimus dorsi
External oblique
Gluteus medius
Great trochanter
Tensor fasciae femoris
Gluteus maximus
Ilio-tibial band
Biceps of leg
Semi-tendinosus
Semi-membranosus
Vastus externus
Plantaris
Gastrocnemius
Peroneus longus
Soleus
Peroneus brevis

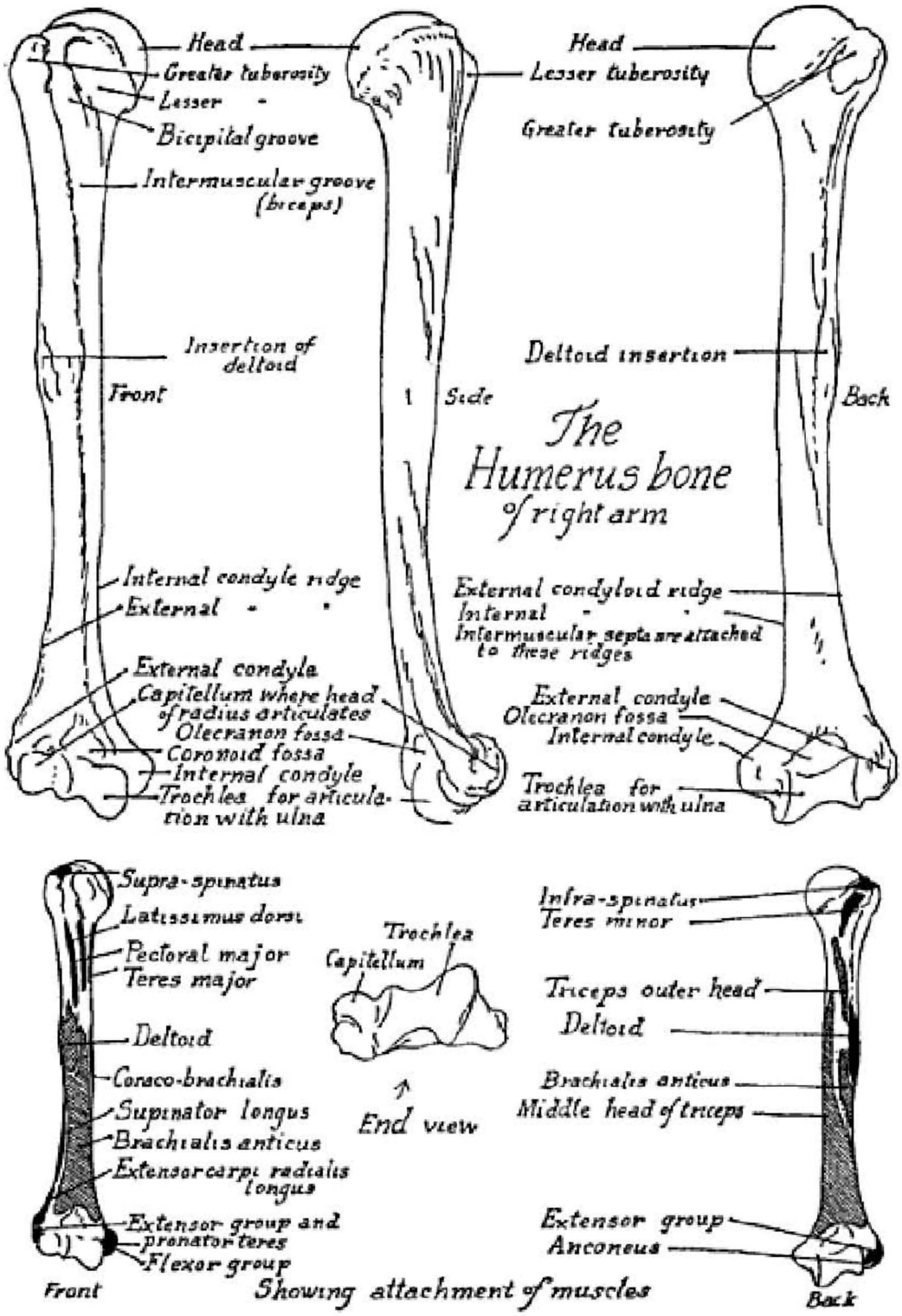


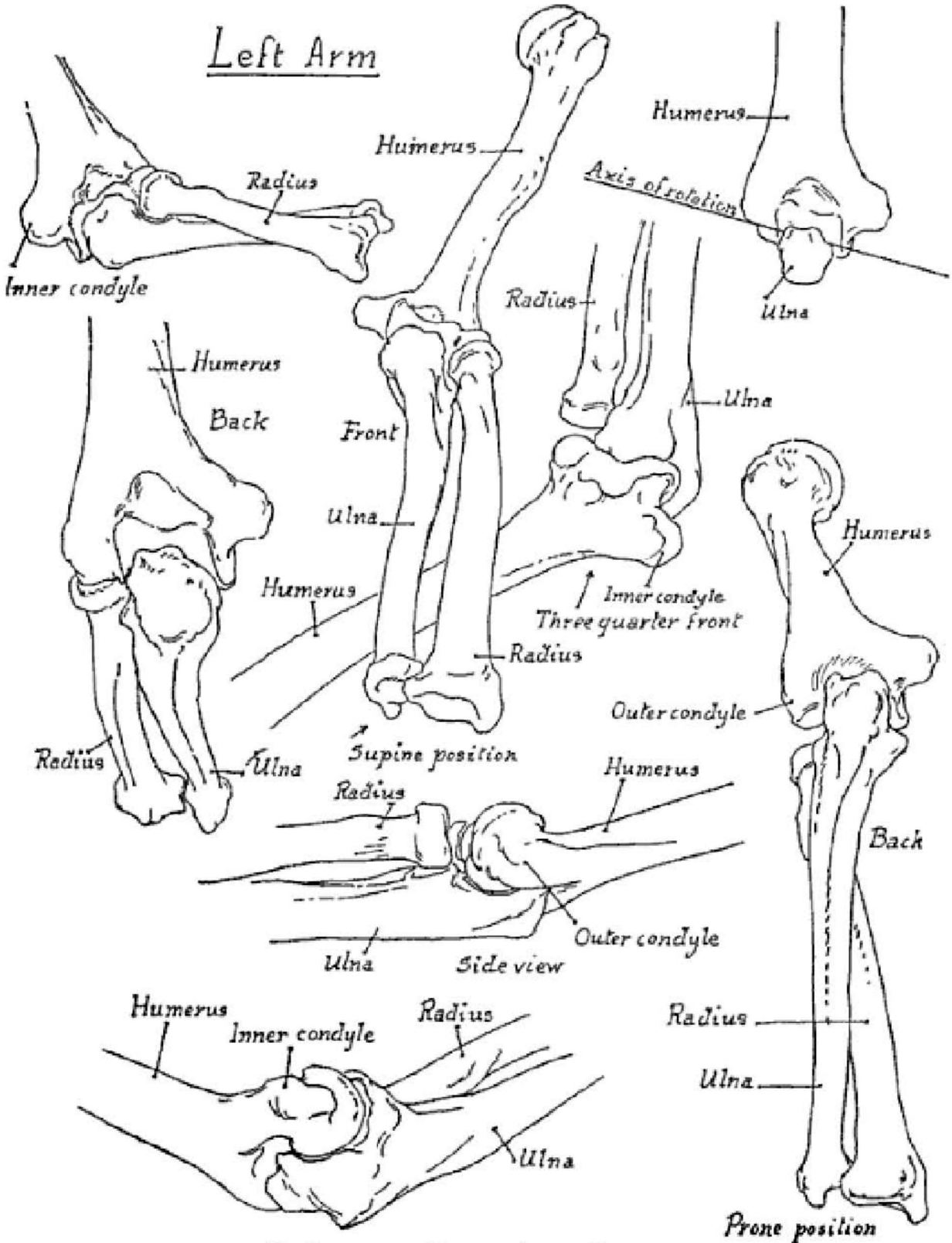

*Sectional diagrams of male torso*



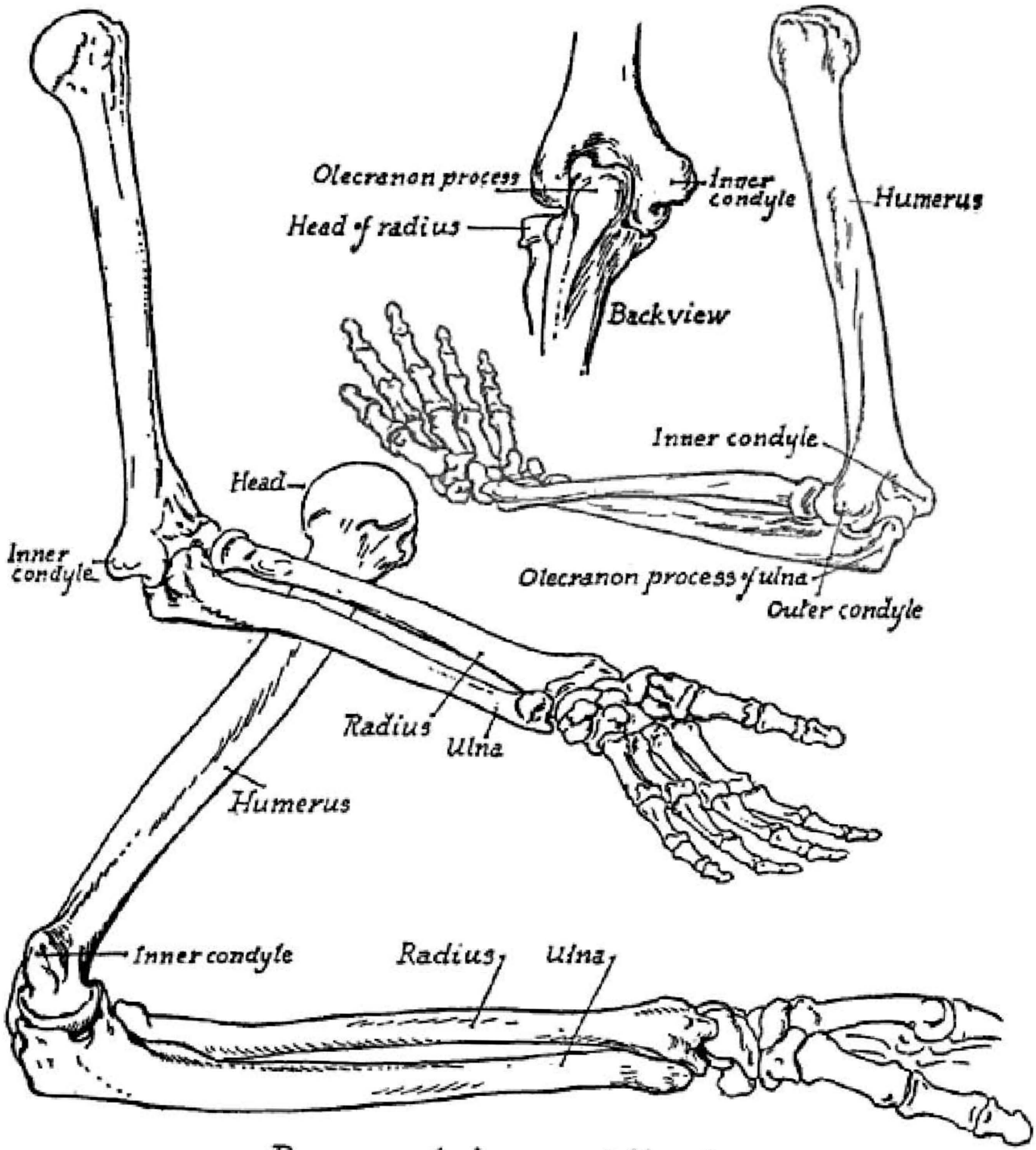
# PART FIVE

# THE ARM

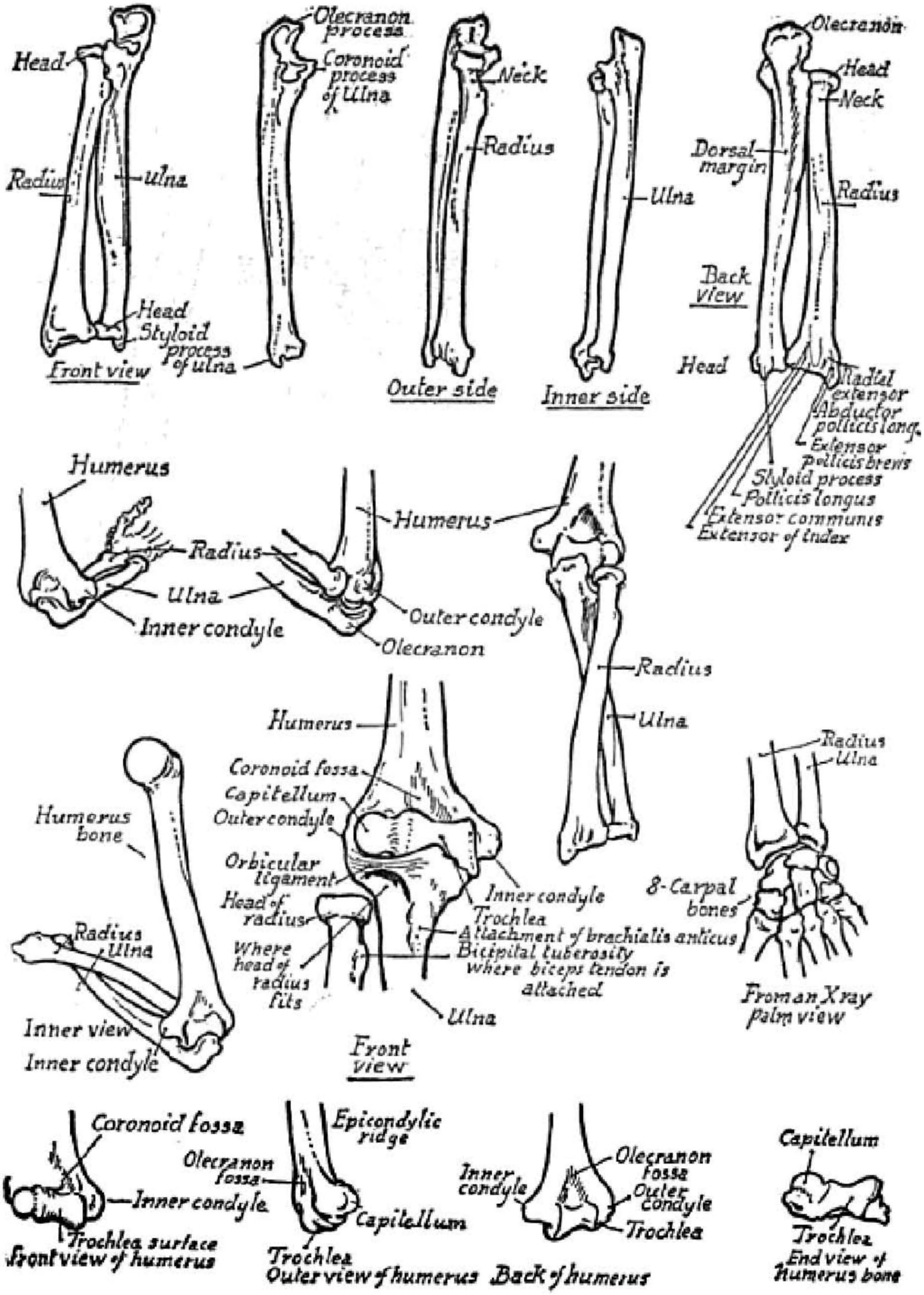

Head
Greater tuberosity
Lesser -
Bicipital groove
Intermuscular groove (biceps)
Insertion of deltoid
Front
Side
Internal condyle ridge
External -
External condyle
Capitellum where head of radius articulates
Olecranon fossa
Coronoid fossa
Internal condyle
Trochlea for articulation with ulna
Head
Lesser tuberosity
Greater tuberosity
Deltoid insertion
Back
The Humerus bone of right arm
External condyloid ridge
Internal -
Intermuscular septa are attached to these ridges
External condyle
Olecranon fossa
Internal condyle
Trochlea for articulation with ulna
Supra-spinatus
Latissimus dorsi
Pectoral major
Teres major
Deltoid
Coraco-brachialis
Supinator longus
Brachialis anticus
Extensor carpi radialis longus
Extensor group and pronator teres
Flexor group
Front
Trochlea
Capitellum
End view
Infra-spinatus
Teres minor
Triceps outer head
Deltoid
Brachialis anticus
Middle head of triceps
Extensor group
Anconeus
Back
Showing attachment of muscles

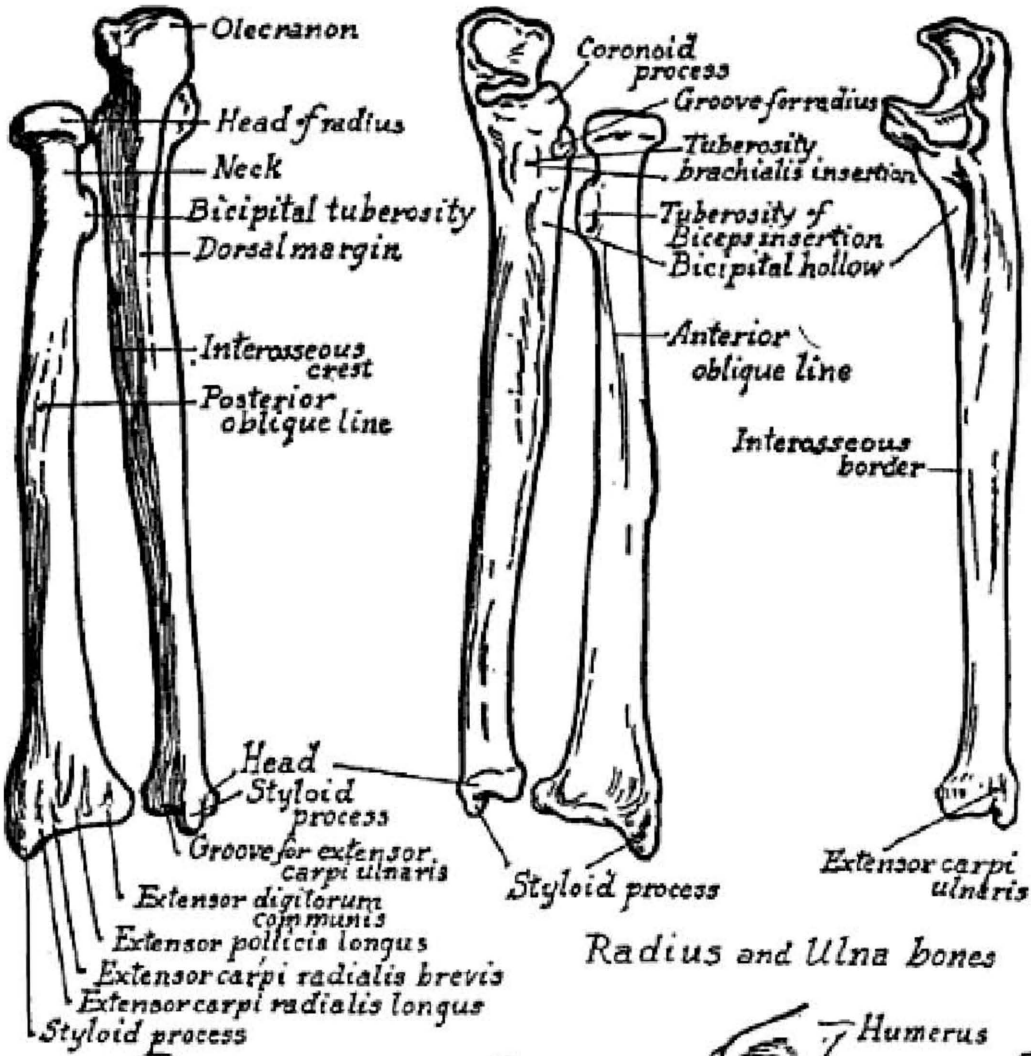



**Various positions of arm bones**

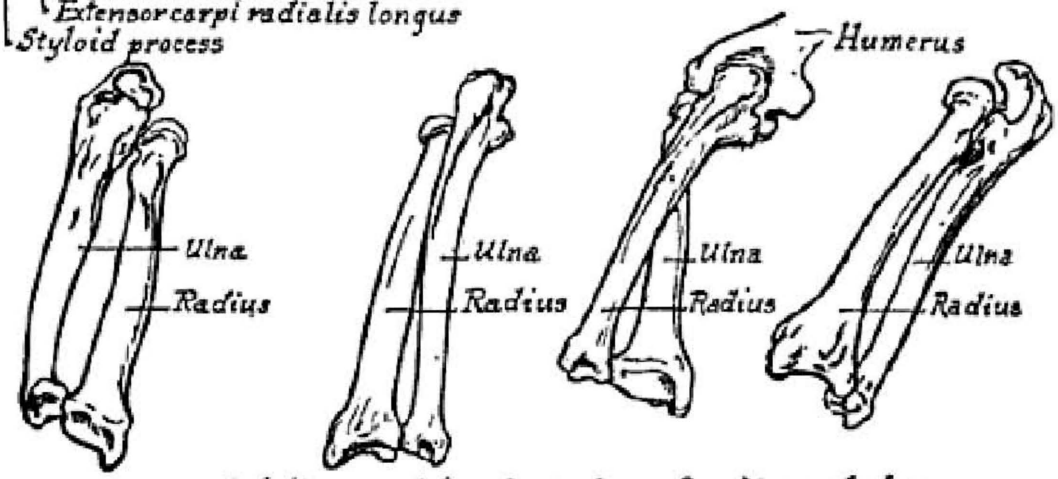



Bones of Arm and Hand

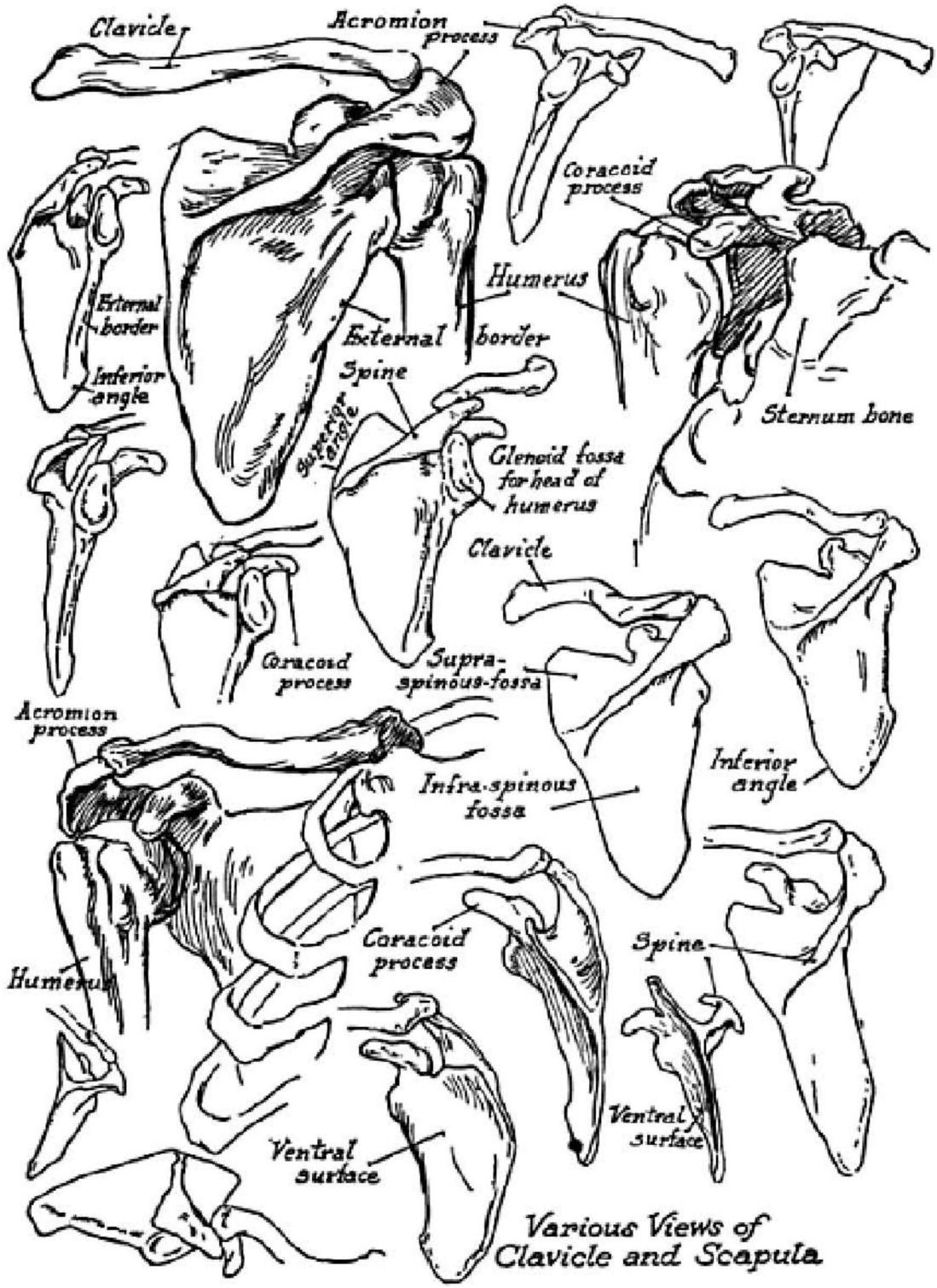

Head
Radius
Ulna
Head
Styloid process of ulna
Front view
Olecranon process
Coronoid process of Ulna
Neck
Radius
Outer side
Ulna
Inner side
Olecranon
Head
Neck
Dorsal margin
Radius
Back view
Head
Radial extensor
Abductor pollicis long.
Extensor pollicis brevis
Styloid process
Pollicis longus
Extensor communis
Extensor of index
Humerus
Radius
Ulna
Inner condyle
Humerus
Outer condyle
Olecranon
Humerus
Radius
Ulna
Humerus bone
Radius
Ulna
Inner view
Inner condyle
Humerus
Coronoid fossa
Capitellum
Outer condyle
Orbicular ligament
Head of radius
Where head of radius fits
Inner condyle
Trochlea
Attachment of brachialis anticus
Bicipital tuberosity where biceps tendon is attached
Ulna
Front view
Radius
Ulna
8-Carpal bones
From an X ray palm view
Coronoid fossa
Inner condyle
Trochlea surface
Front view of humerus
Epicondylic ridge
Olecranon fossa
Capitellum
Trochlea
Outer view of humerus
Inner condyle
Olecranon fossa
Outer condyle
Trochlea
Back of humerus
Capitellum
Trochlea
End view of humerus bone



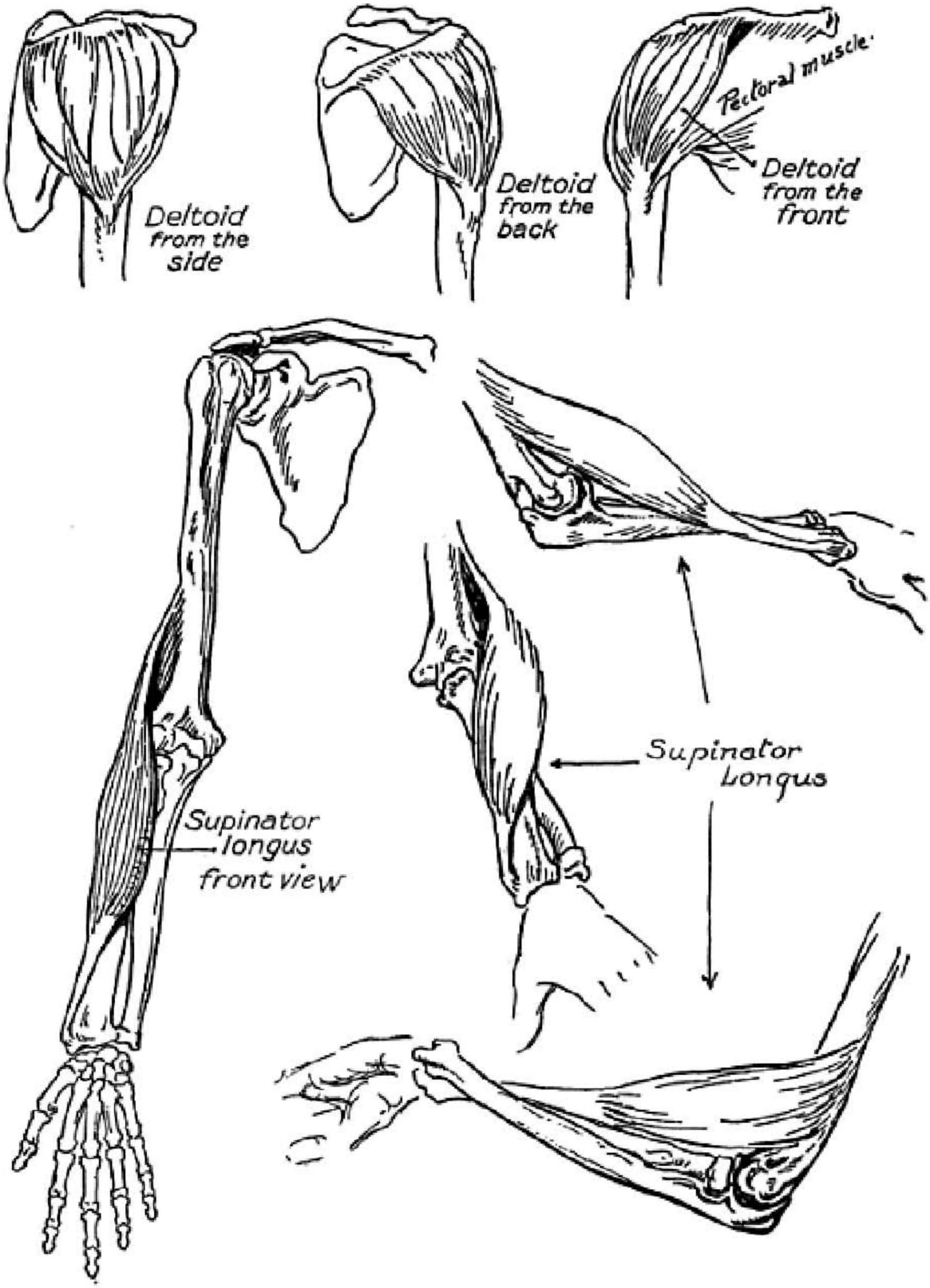

Radius and Ulna bones

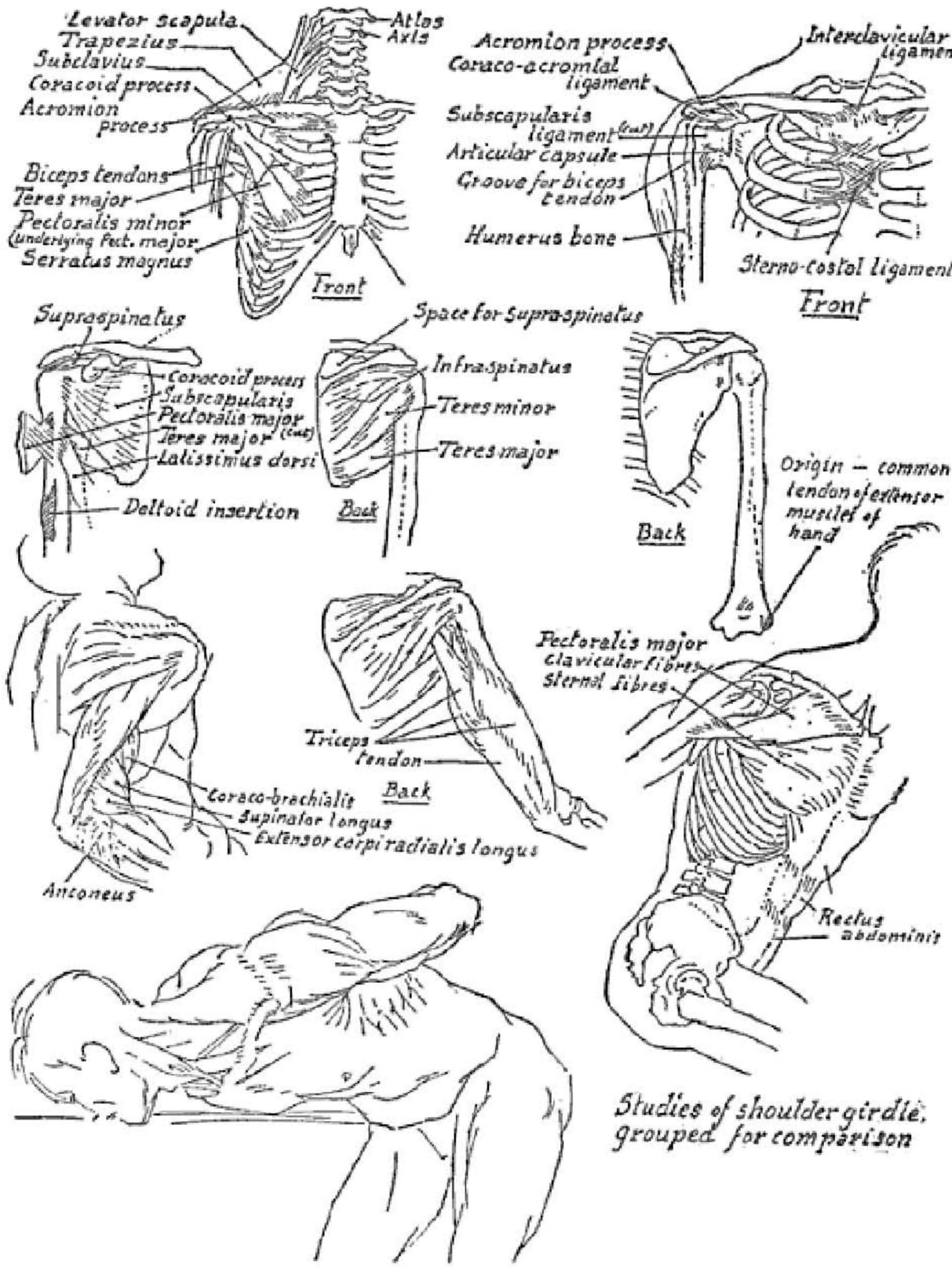


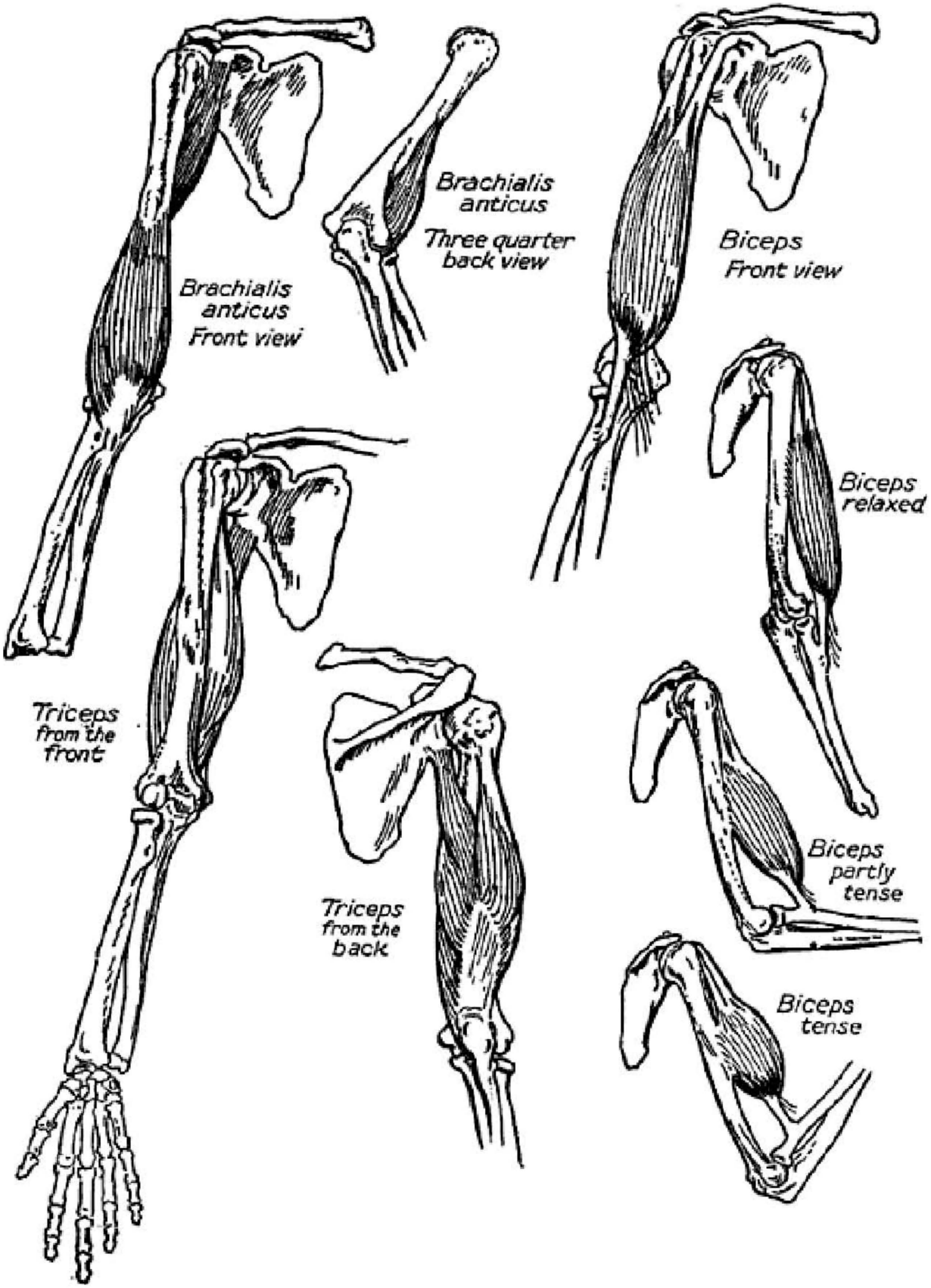

Relations and foreshortenings of radius and ulna

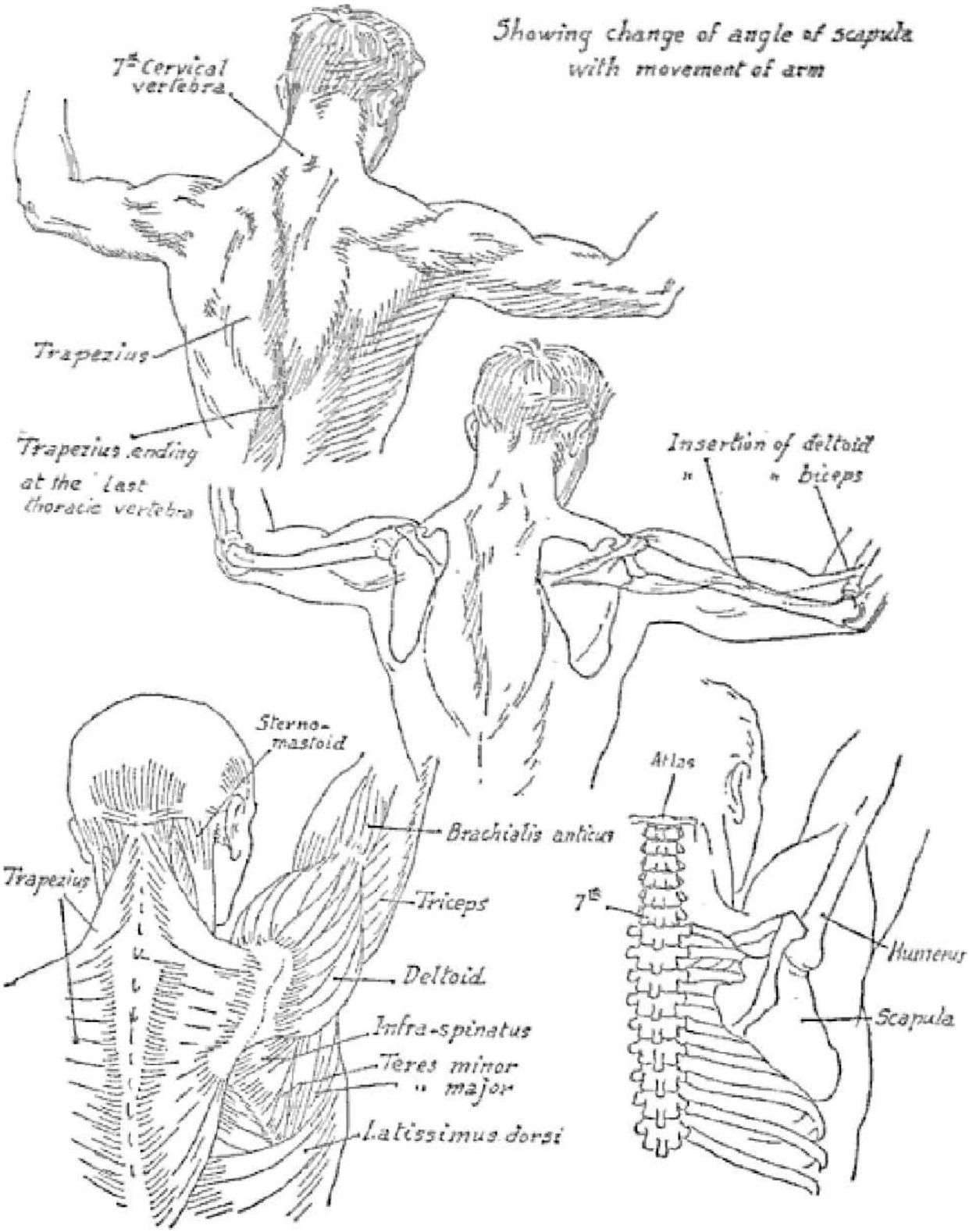


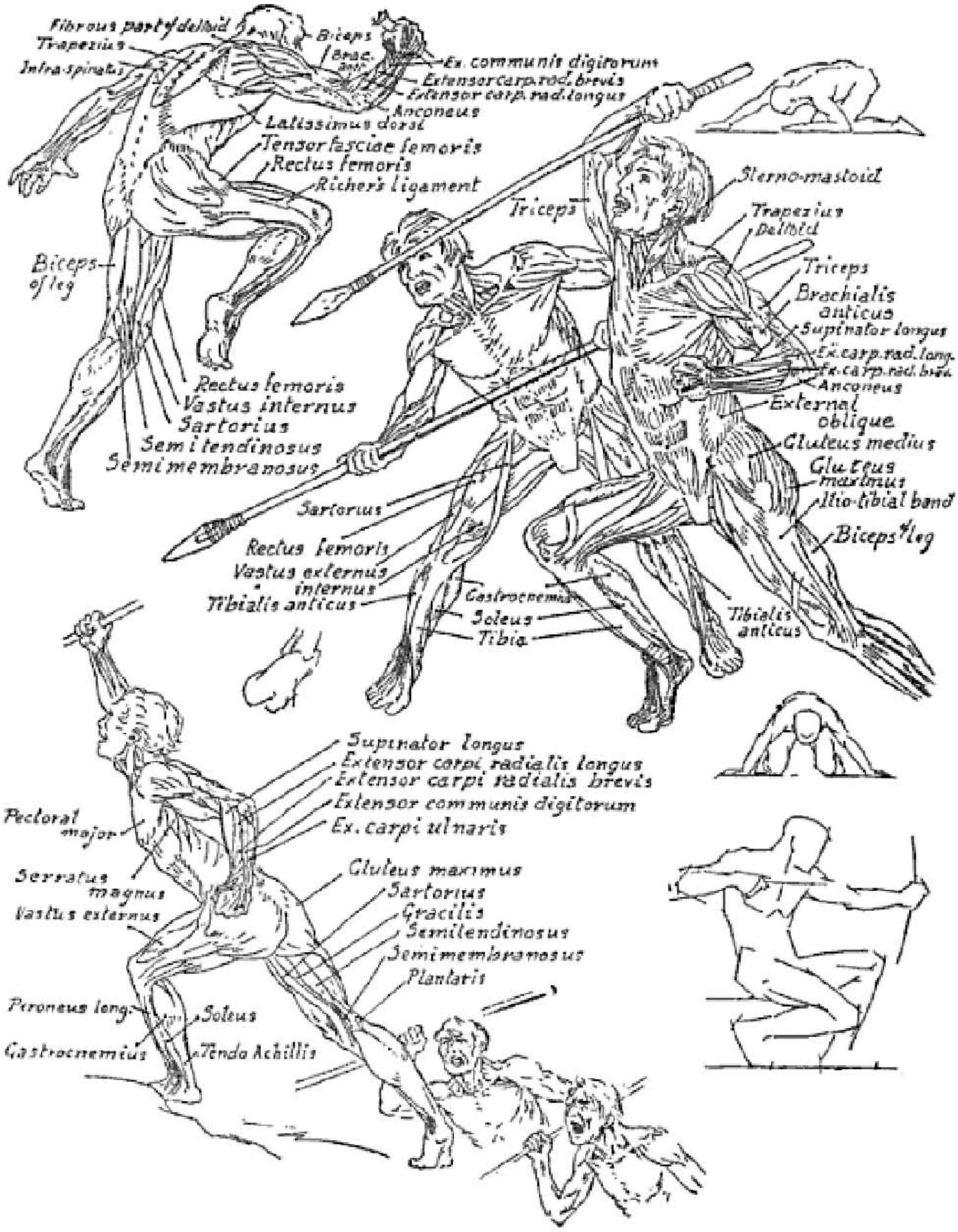

Various Views of Clavicle and Scapula

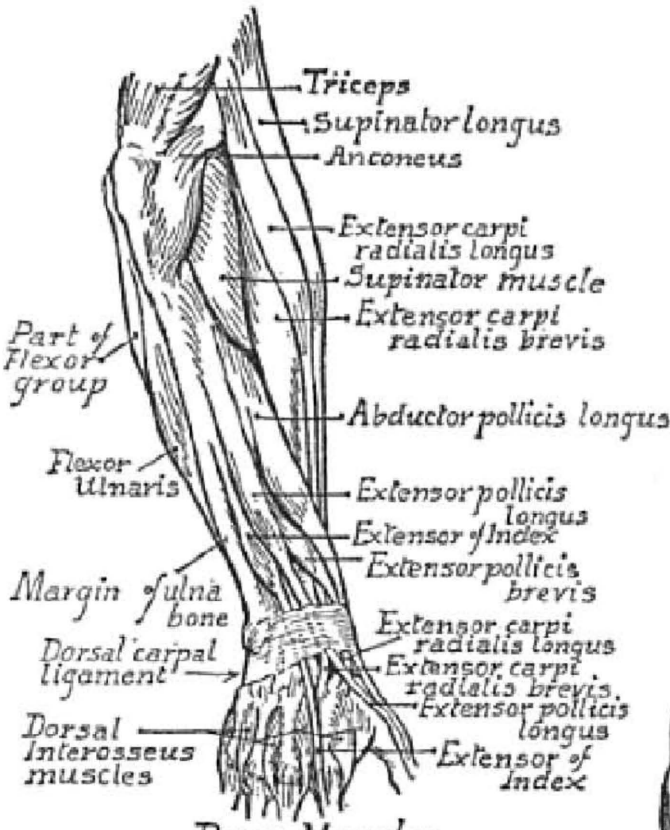

Deltoid from the side
Deltoid from the back
Pectoral muscle
Deltoid from the front
Supinator longus front view
Supinator Longus


Levator scapula
Trapezius
Subclavius
Coracoid process
Acromion process
Biceps tendons
Teres major
Pectoralis minor (underlying Pect. major)
Serratus magnus
Atlas
Axis
Front
Acromion process
Coraco-acromial ligament
Subscapularis ligament (cut)
Articular capsule
Groove for biceps tendon
Humerus bone
Interclavicular ligament
Sterno-costal ligament
Front
Supraspinatus
Coracoid process
Subscapularis
Pectoralis major (cut)
Teres major
Latissimus dorsi
Deltoid insertion
Space for Supraspinatus
Infraspinatus
Teres minor
Teres major
Back
Back
Origin — common tendon of extensor muscles of hand
Pectoralis major
clavicular fibres
sternal fibres
Triceps tendon
Back
Coraco-brachialis
Supinator longus
Extensor carpi radialis longus
Anconeus
Rectus abdominis
Studies of shoulder girdle, grouped for comparison

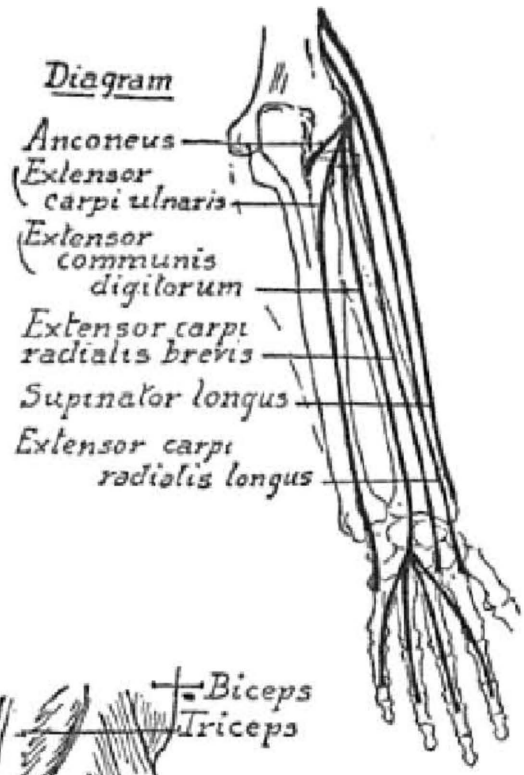

Brachialis anticus
Front view
Brachialis anticus
Three quarter back view
Biceps
Front view
Biceps relaxed
Triceps from the front
Triceps from the back
Biceps partly tense
Biceps tense

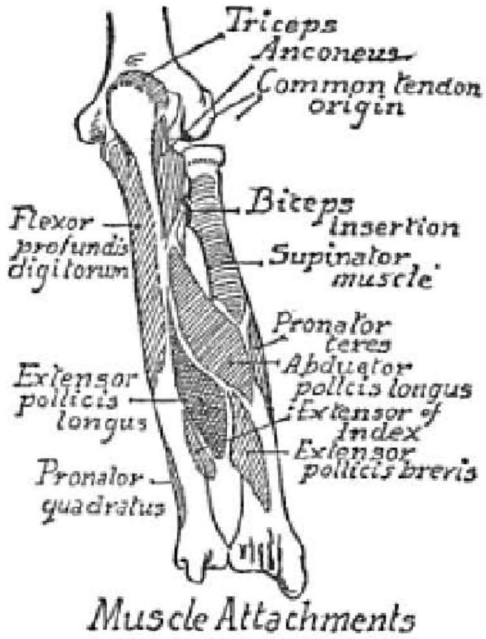

Showing change of angle of scapula with movement of arm
7th Cervical vertebra
Trapezius
Trapezius ending at the last thoracic vertebra
Insertion of deltoid
" " biceps
Sterno-mastoid
Brachialis anticus
Trapezius
Triceps
Deltoid
Infra-spinatus
Teres minor
" major
Latissimus dorsi
Atlas
7th
Humerus
Scapula


Fibrous part of deltoid
Trapezius
Intra-spinatus
Biceps Brac.
Ex. communis digitorum
Extensor carp. rad. brevis
Extensor carp. rad. longus
Anconeus
Latissimus dorsi
Tensor fasciae femoris
Rectus femoris
Richet's ligament
Biceps of leg
Rectus femoris
Vastus internus
Sartorius
Semi tendinosus
Semimembranosus
Sterno-mastoid
Triceps
Trapezius
Deltoid
Triceps
Brachialis anticus
Supinator longus
Ex. carp. rad. long.
Ex. carp. rad. brev.
Anconeus
External oblique
Gluteus medius
Gluteus maximus
Ilio-tibial band
Biceps of leg
Sartorius
Rectus femoris
Vastus externus
Vastus internus
Tibialis anticus
Gastrocnemius
Soleus
Tibia
Tibialis anticus
Supinator longus
Extensor carpi radialis longus
Extensor carpi radialis brevis
Extensor communis digitorum
Ex. carpi ulnaris
Pectoral major
Serratus magnus
Vastus externus
Gluteus maximus
Sartorius
Gracilis
Semitendinosus
Semimembranosus
Plantaris
Peroneus long.
Soleus
Gastrocnemius
Tendo Achillis

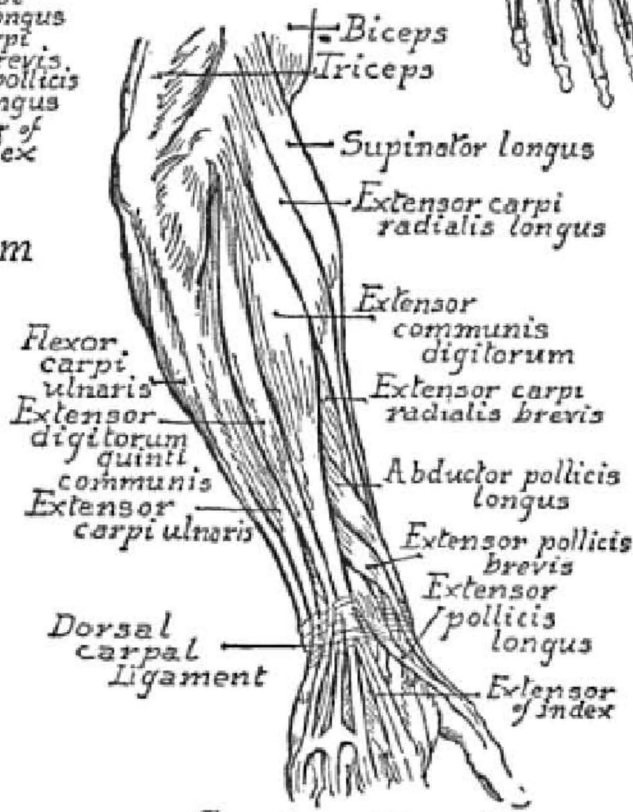



Deep Muscles
Dorsal side of Arm

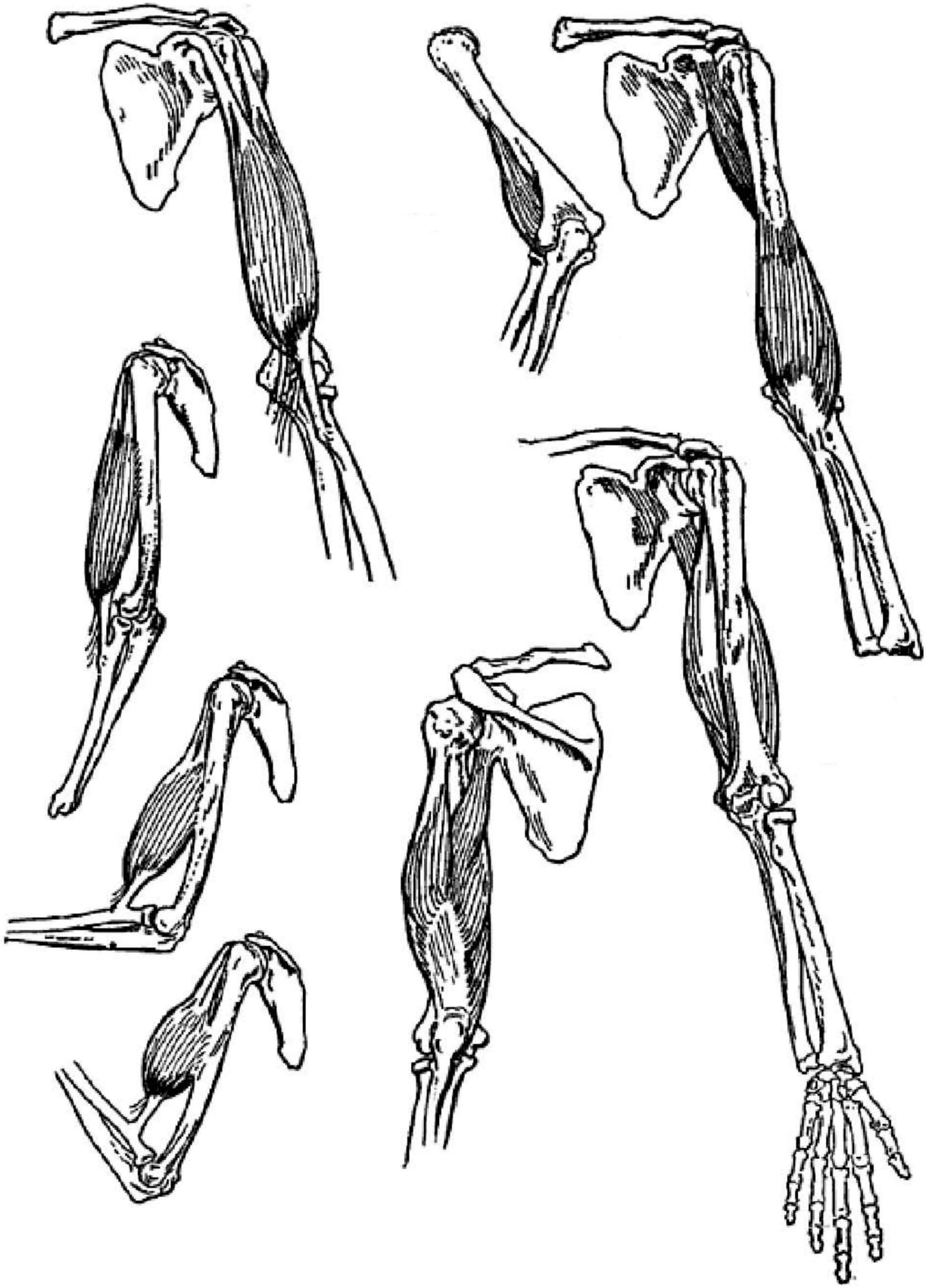


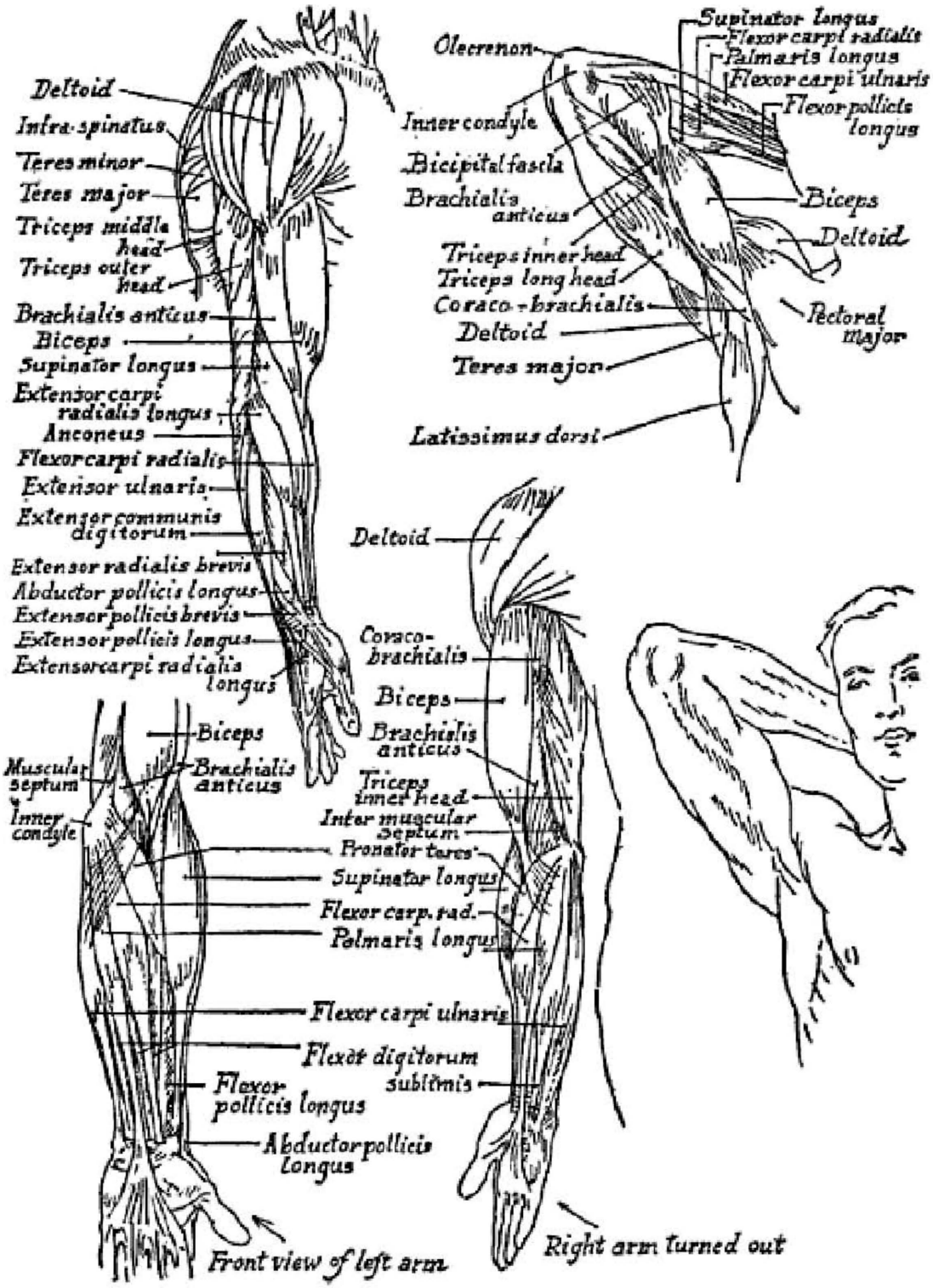



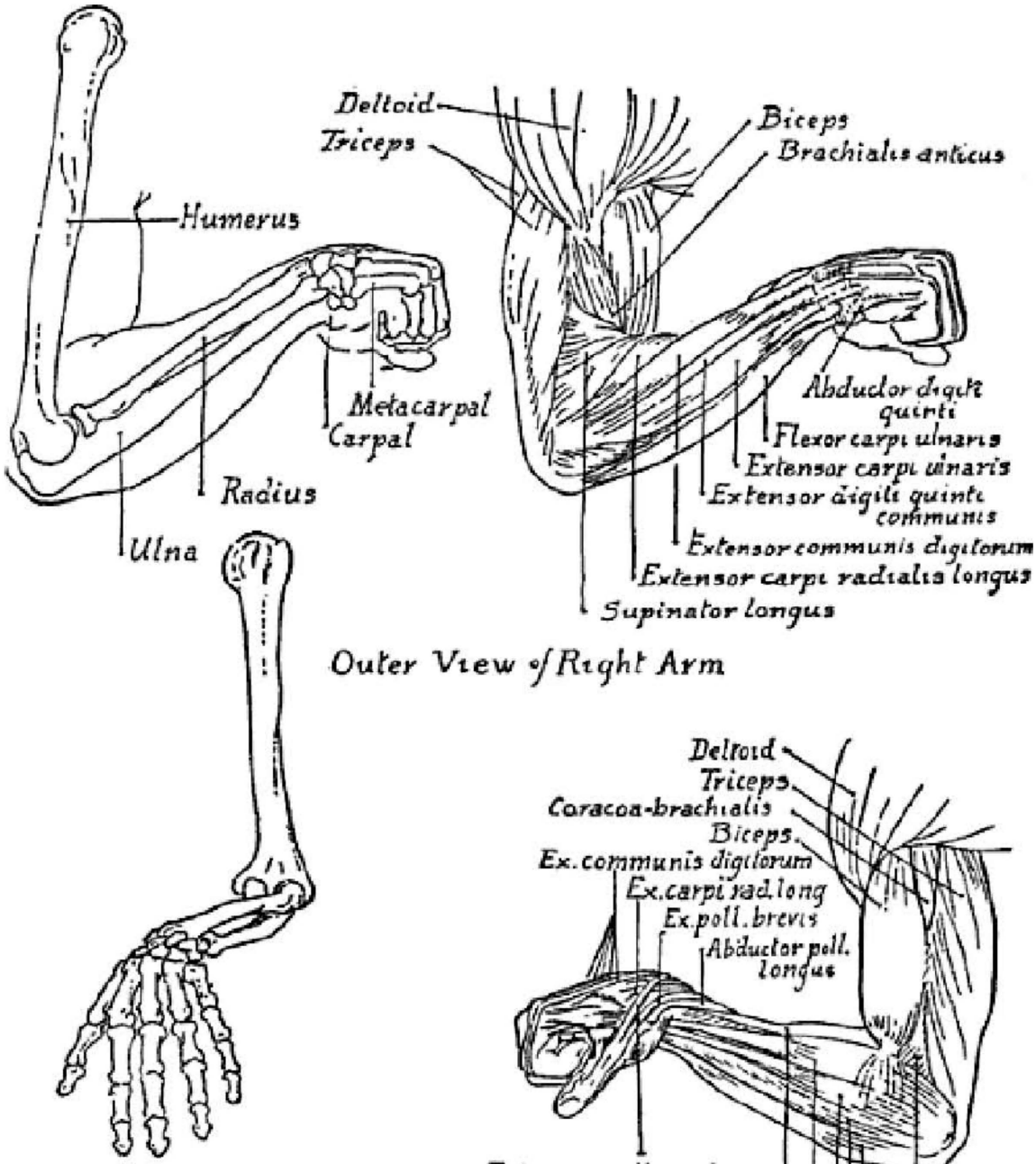

Muscle Attachments




Surface Muscles
Dorsal side of Arm



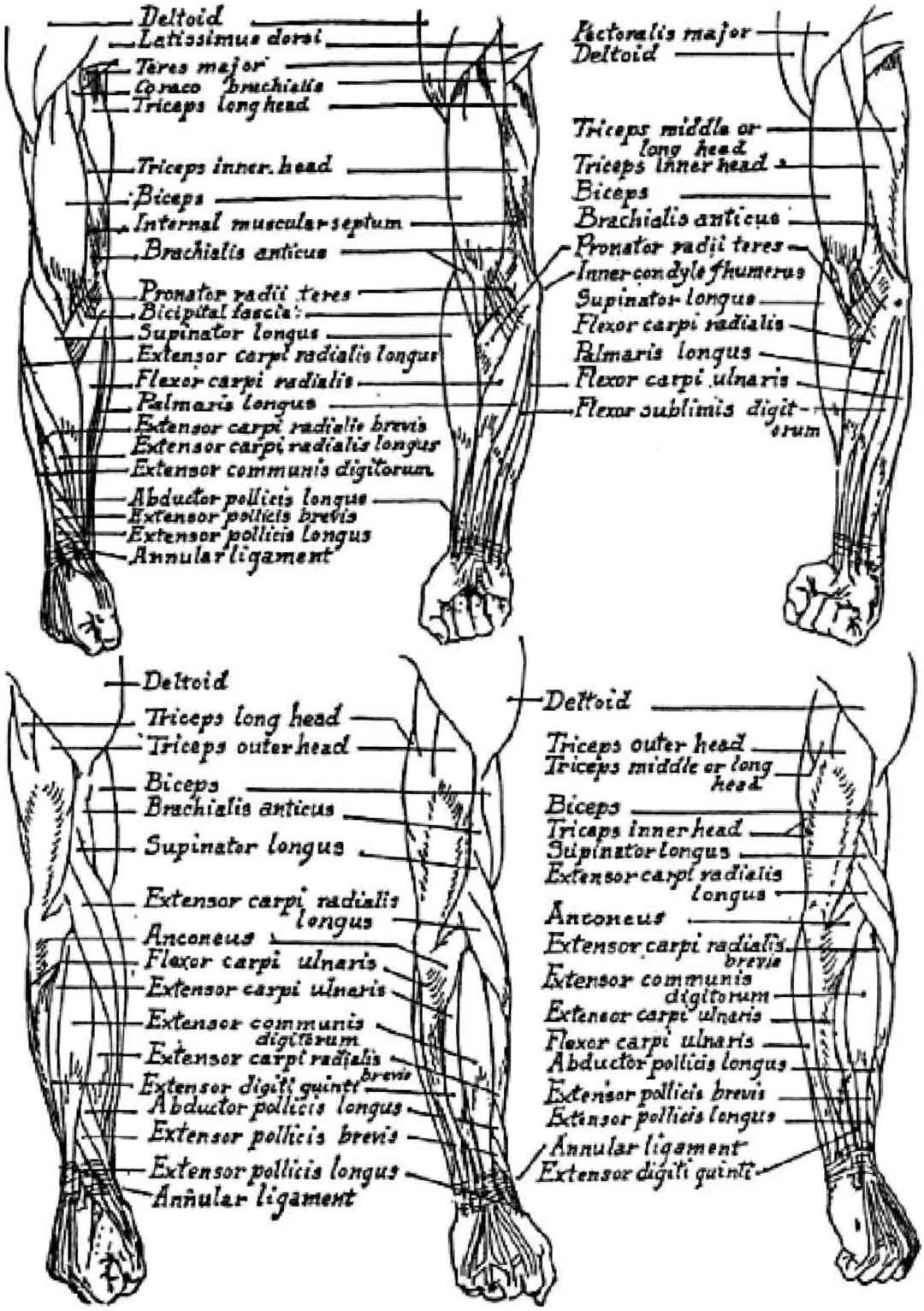

Deltoid
Infra-spinatus
Teres minor
Teres major
Triceps middle head
Triceps outer head
Brachialis anticus
Biceps
Supinator longus
Extensor carpi radialis longus
Anconeus
Flexor carpi radialis
Extensor ulnaris
Extensor communis digitorum
Extensor radialis brevis
Abductor pollicis longus
Extensor pollicis brevis
Extensor pollicis longus
Extensor carpi radialis longus
Biceps
Muscular septum
Brachialis anticus
Inner condyle
Front view of left arm
Olecrenon
Inner condyle
Bicipital fascia
Brachialis anticus
Triceps inner head
Triceps long head
Coraco-brachialis
Deltoid
Teres major
Latissimus dorsi
Supinator longus
Flexor carpi radialis
Palmaris longus
Flexor carpi ulnaris
Flexor pollicis longus
Biceps
Deltoid
Pectoral major
Deltoid
Coraco-brachialis
Biceps
Brachialis anticus
Triceps inner head
Inter muscular septum
Pronator teres
Supinator longus
Flexor carp. rad.
Palmaris longus
Flexor carpi ulnaris
Flexor digitorum sublimis
Flexor pollicis longus
Abductor pollicis longus
Right arm turned out

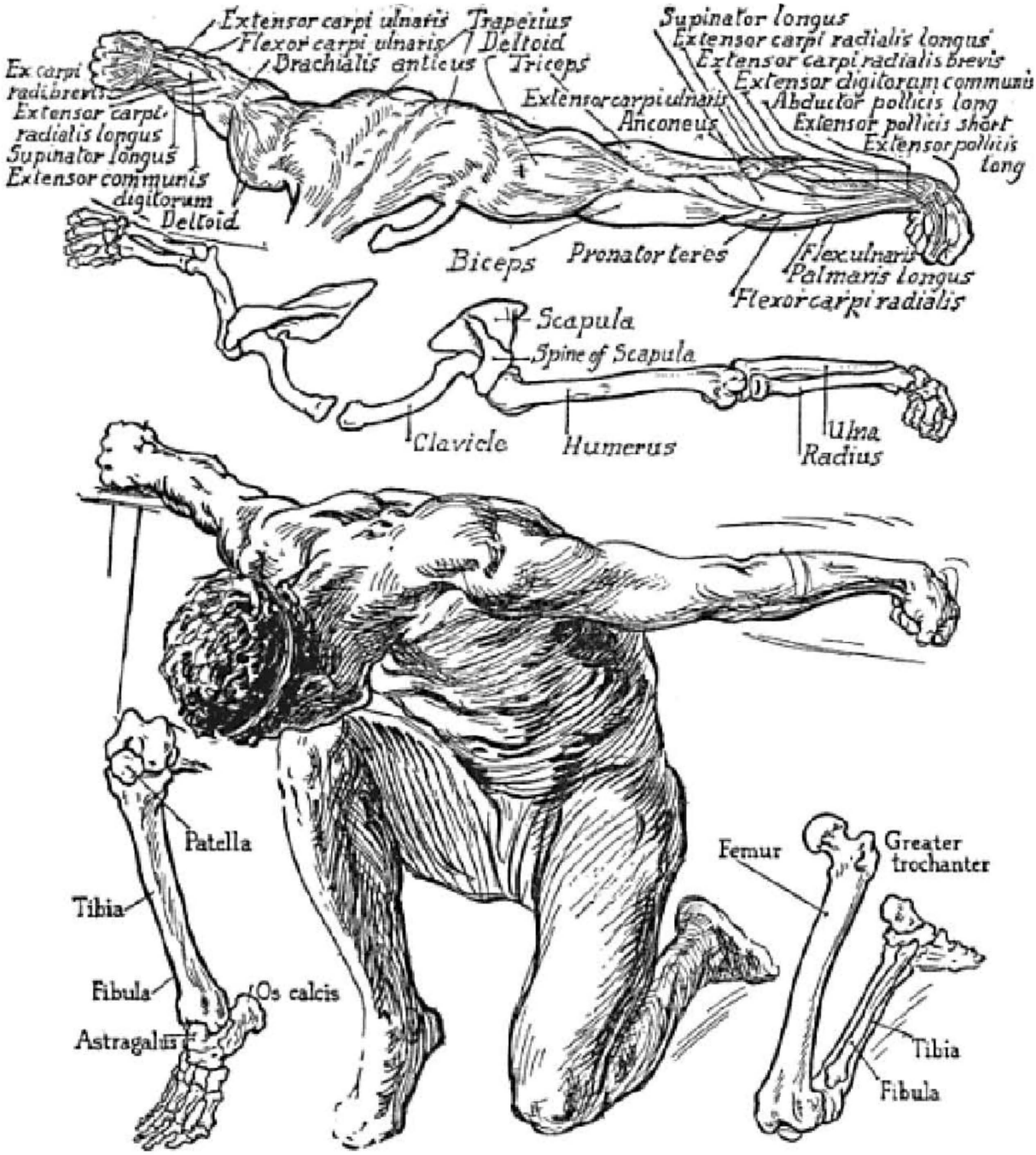


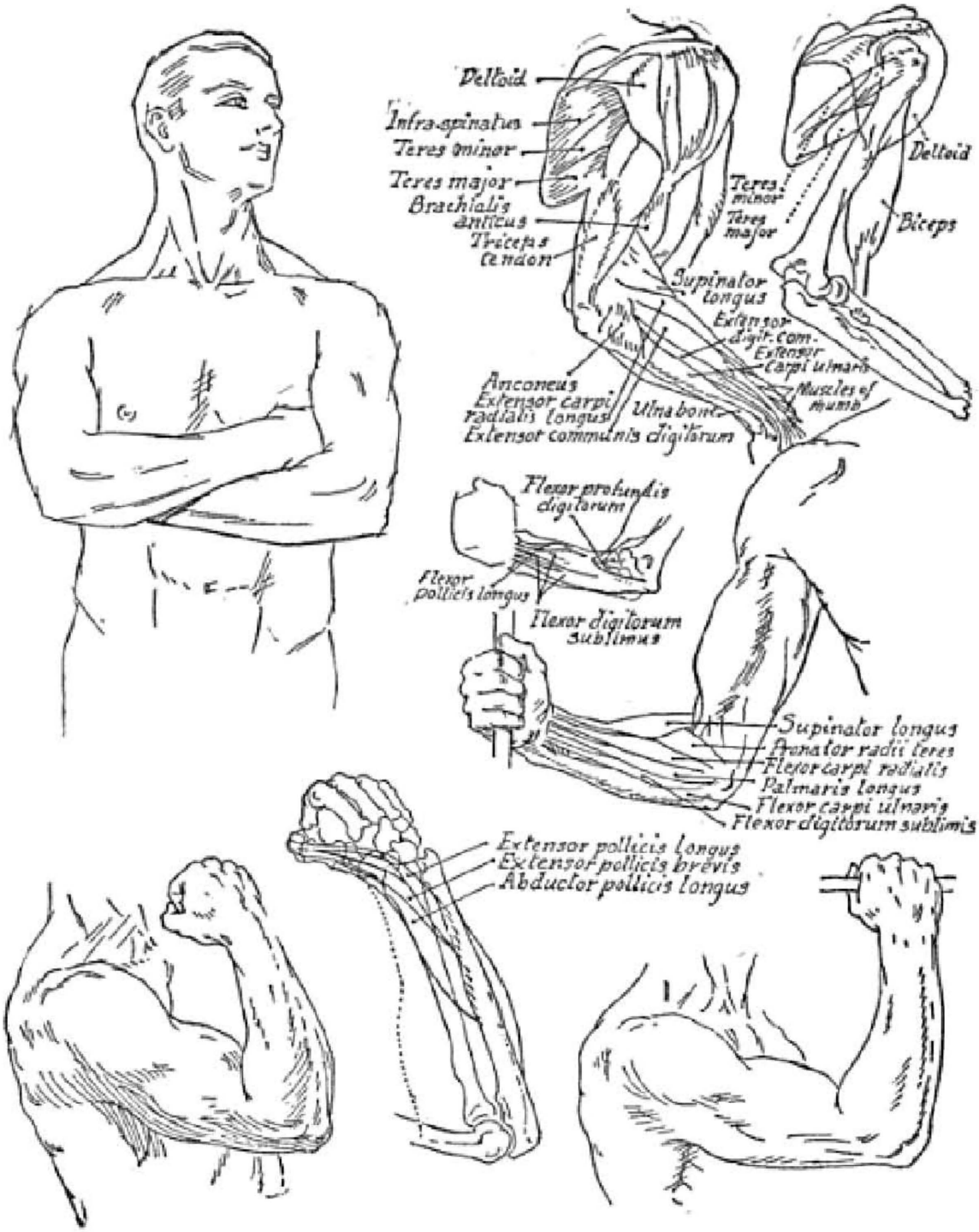

Outer View of Right Arm

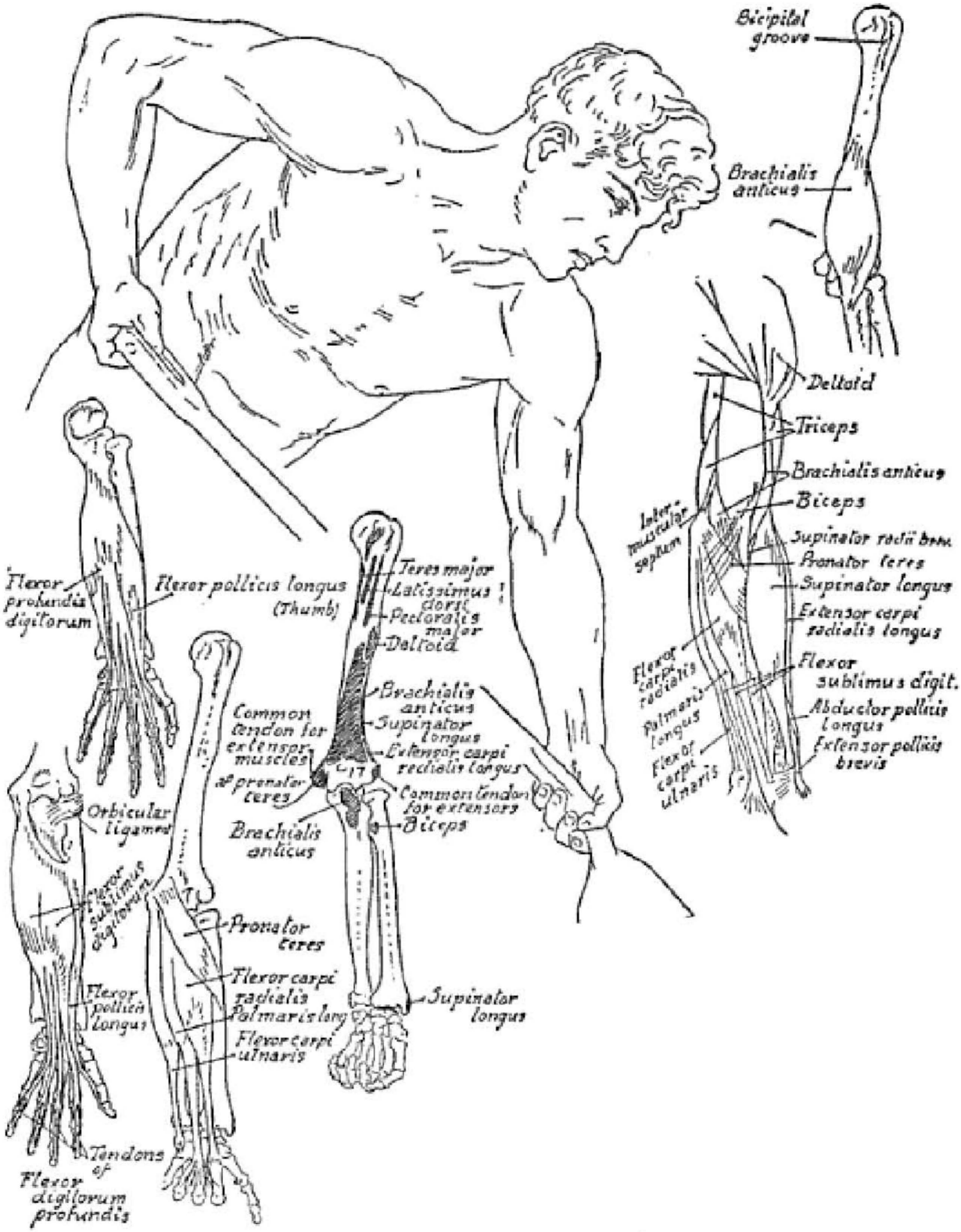


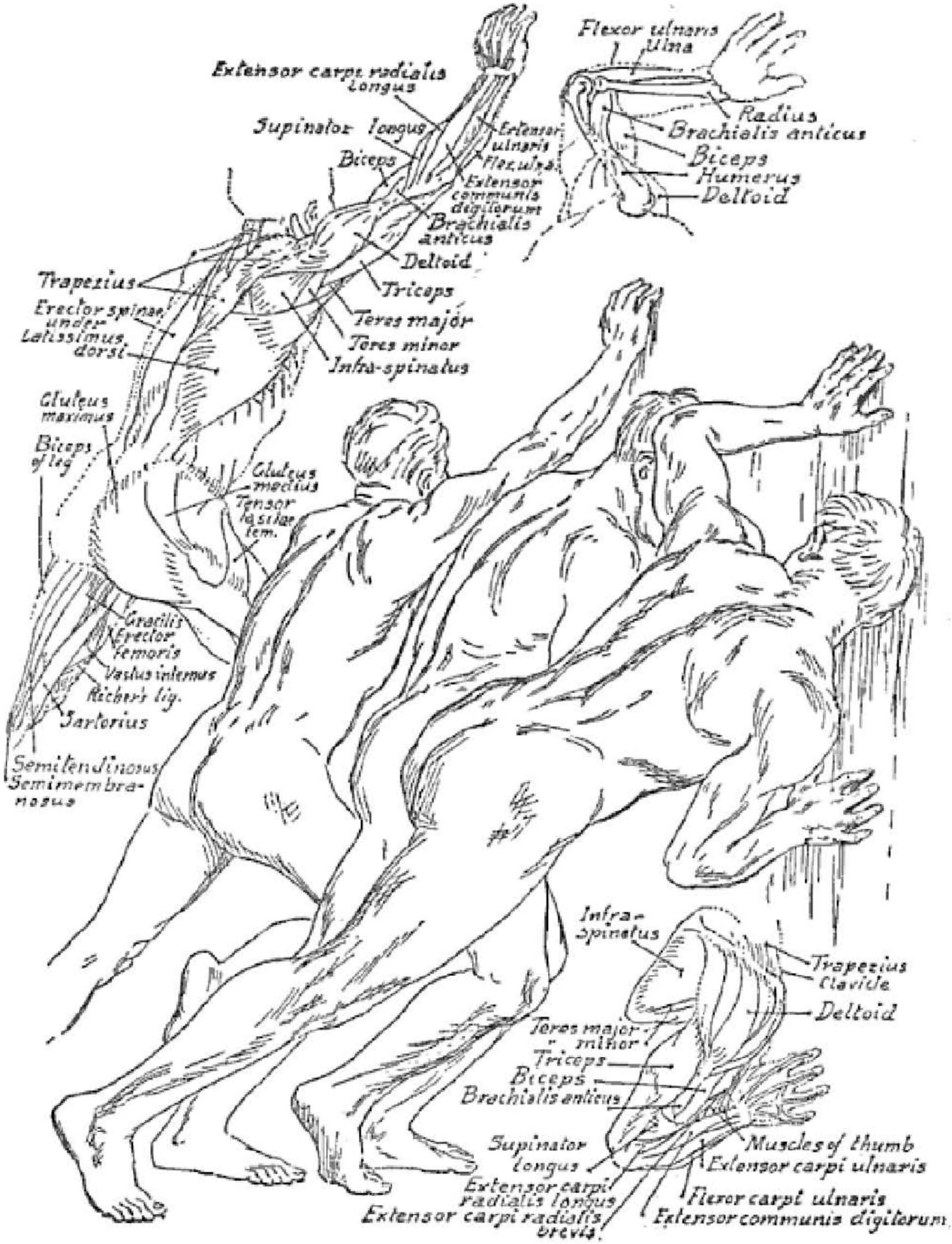

Inner view


Deltoid
Latissimus dorsi
Teres major
Coraco brachialis
Triceps long head
Triceps inner. head
Biceps
Internal muscular septum
Brachialis anticus
Pronator radii teres
Bicipital fascia
Supinator longus
Extensor carpi radialis longus
Flexor carpi radialis
Palmaris longus
Extensor carpi radialis brevis
Extensor carpi radialis longus
Extensor communis digitorum
Abductor pollicis longus
Extensor pollicis brevis
Extensor pollicis longus
Annular ligament
Pectoralis major
Deltoid
Triceps middle or long head
Triceps inner head
Biceps
Brachialis anticus
Pronator radii teres
Inner condyle of humerus
Supinator longus
Flexor carpi radialis
Palmaris longus
Flexor carpi ulnaris
Flexor sublimis digitorum
Deltoid
Triceps long head
Triceps outer head
Biceps
Brachialis anticus
Supinator longus
Extensor carpi radialis longus
Anconeus
Flexor carpi ulnaris
Extensor carpi ulnaris
Extensor communis digitorum
Extensor carpi radialis brevis
Extensor digiti quinti
Abductor pollicis longus
Extensor pollicis brevis
Extensor pollicis longus
Annular ligament
Deltoid
Triceps outer head
Triceps middle or long head
Biceps
Triceps inner head
Supinator longus
Extensor carpi radialis longus
Anconeus
Extensor carpi radialis brevis
Extensor communis digitorum
Extensor carpi ulnaris
Flexor carpi ulnaris
Abductor pollicis longus
Extensor pollicis brevis
Extensor pollicis longus
Annular ligament
Extensor digiti quinti


Extensor carpi ulnaris
Flexor carpi ulnaris
Brachialis anticus
Trapezius
Deltoid
Triceps
Supinator longus
Extensor carpi radialis longus
Extensor carpi radialis brevis
Extensor digitorum communis
Abductor pollicis long
Extensor pollicis short
Extensor pollicis long
Ex carpi radialis brevis
Extensor carpi radialis longus
Supinator longus
Extensor communis digitorum
Deltoid
Extensor carpi ulnaris
Anconeus
Biceps
Pronator teres
Flexor ulnaris
Palmaris longus
Flexor carpi radialis
Scapula
Spine of Scapula
Clavicle
Humerus
Ulna
Radius
Patella
Tibia
Fibula
Os calcis
Astragalus
Femur
Greater trochanter
Tibia
Fibula


Deltoid
Infra-spinatus
Teres minor
Teres major
Brachialis anticus
Triceps tendon
Anconeus
Extensor carpi radialis longus
Extensor communis digitorum
Ulna bone
Supinator longus
Extensor digit. com.
Extensor carpi ulnaris
Muscles of thumb
Deltoid
Teres minor
Teres major
Biceps
Flexor profundis digitorum
Flexor pollicis longus
Flexor digitorum sublimus
Supinator longus
Pronator radii teres
Flexor carpi radialis
Palmaris longus
Flexor carpi ulnaris
Flexor digitorum sublimis
Extensor pollicis longus
Extensor pollicis brevis
Abductor pollicis longus


Bicipital groove
Brachialis anticus
Deltoid
Triceps
Brachialis anticus
Biceps
Supinator radii brev.
Pronator teres
Supinator longus
Extensor carpi radialis longus
Flexor sublimus digit.
Abductor pollicis longus
Extensor pollicis brevis
Flexor carpi radialis
Palmaris longus
Flexor carpi ulnaris
Lateral muscular septum
Flexor profundis digitorum
Flexor pollicis longus (Thumb)
Teres major
Latissimus dorsi
Pectoralis major
Deltoid
Brachialis anticus
Supinator longus
Extensor carpi radialis longus
Common tendon for extensors
Biceps
Common tendon for extensor muscles
& pronator teres
Orbicular ligament
Brachialis anticus
Flexor sublimus digitorum
Pronator teres
Flexor carpi radialis
Palmaris long.
Flexor carpi ulnaris
Flexor pollicis longus
Supinator longus
Tendons of Flexor digitorum profundis

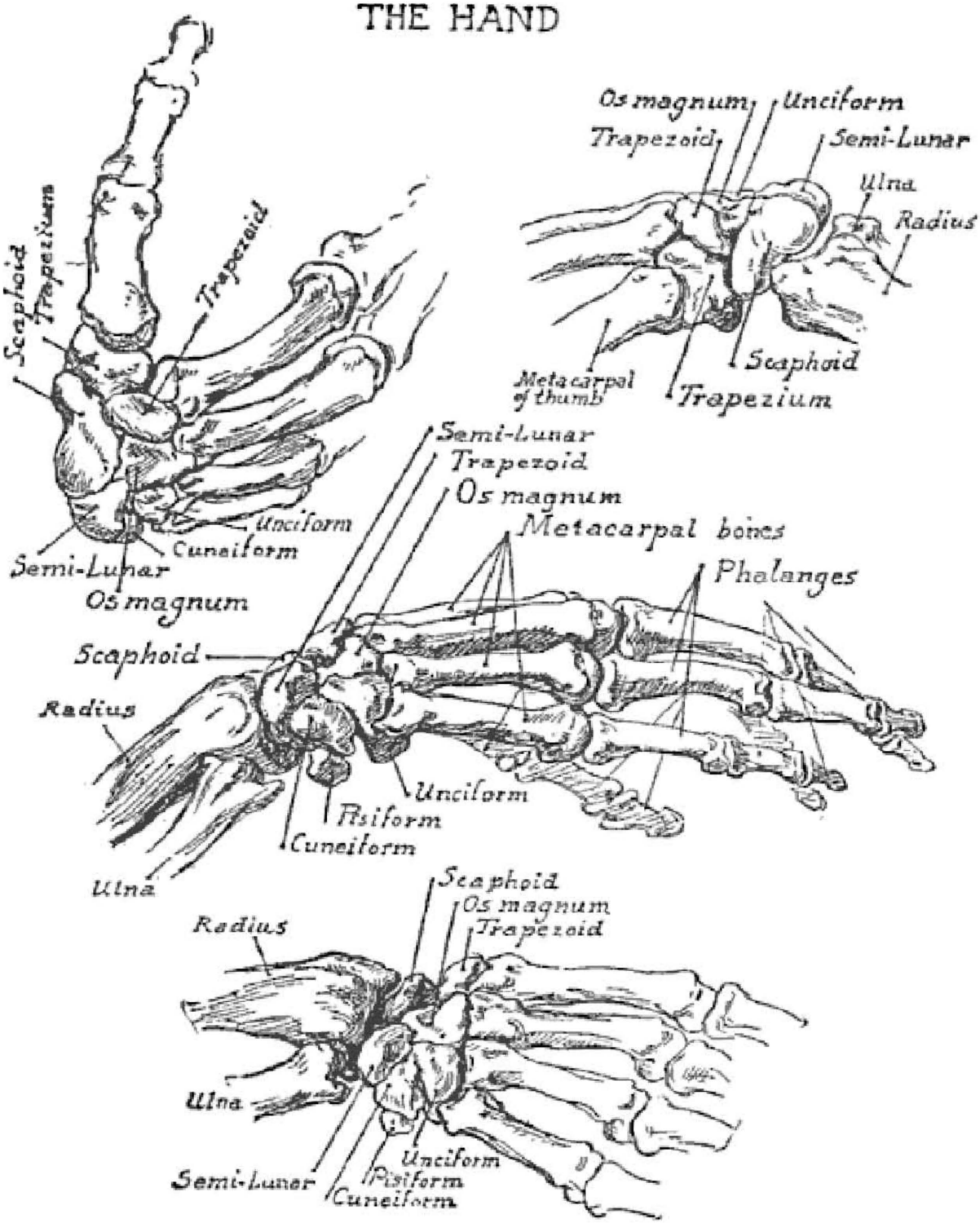

Flexor ulnaris
Ulna
Extensor carpi radialis longus
Radius
Brachialis anticus
Supinator longus
Extensor ulnaris
Biceps
Flexor ulnaris
Humerus
Extensor communis digitorum
Deltoid
Brachialis anticus
Deltoid
Trapezius
Triceps
Erector spinae under Latissimus dorsi
Teres major
Teres minor
Infra-spinatus
Gluteus maximus
Biceps of leg
Gluteus medius
Tensor fasciae lem.
Gracilis
Erector femoris
Vastus internus
Richet's lig.
Sartorius
Semitendinosus
Semimembranosus
Infra-Spinatus
Trapezius
Clavicle
Deltoid
Teres major
" minor
Triceps
Biceps
Brachialis anticus
Supinator longus
Muscles of thumb
Extensor carpi ulnaris
Extensor carpi radialis longus
Flexor carpi ulnaris
Extensor carpi radialis brevis
Extensor communis digitorum

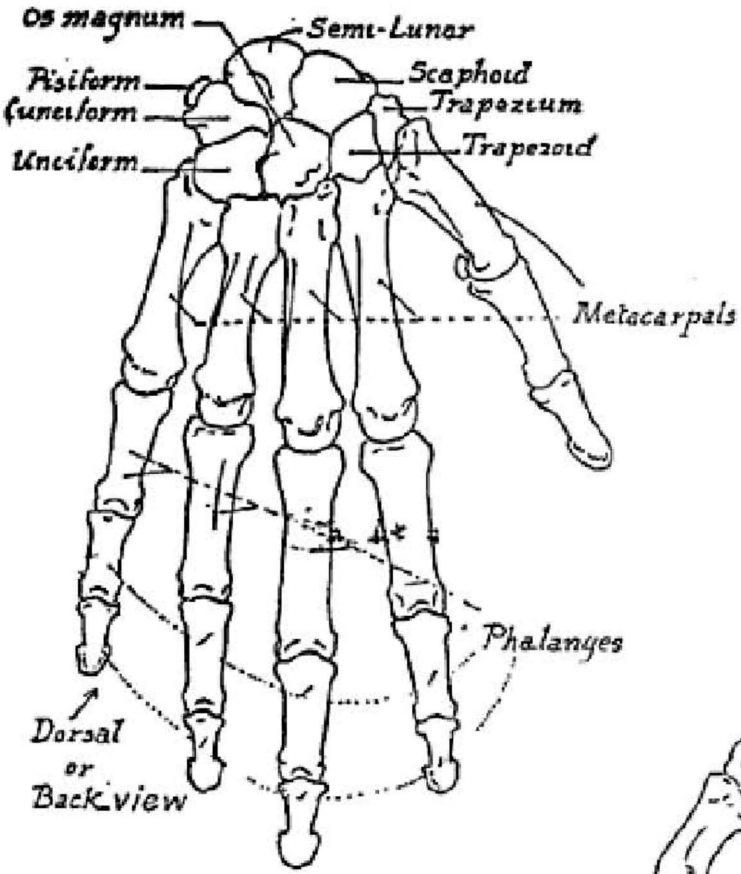


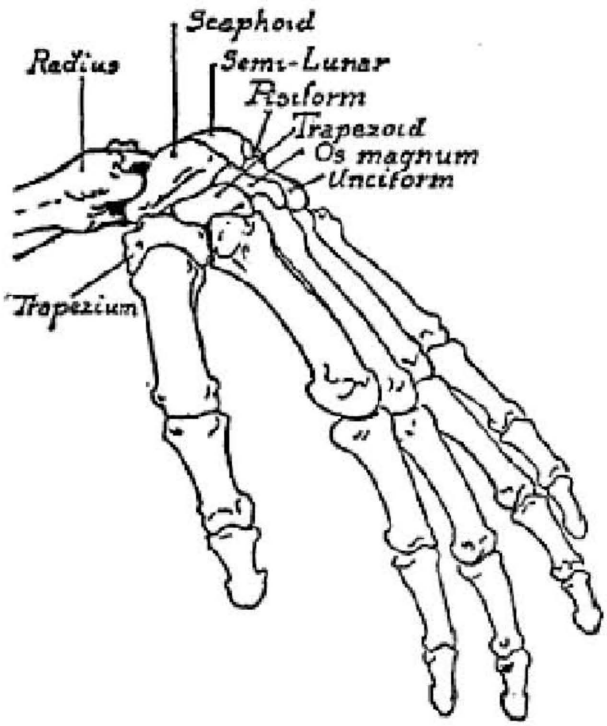
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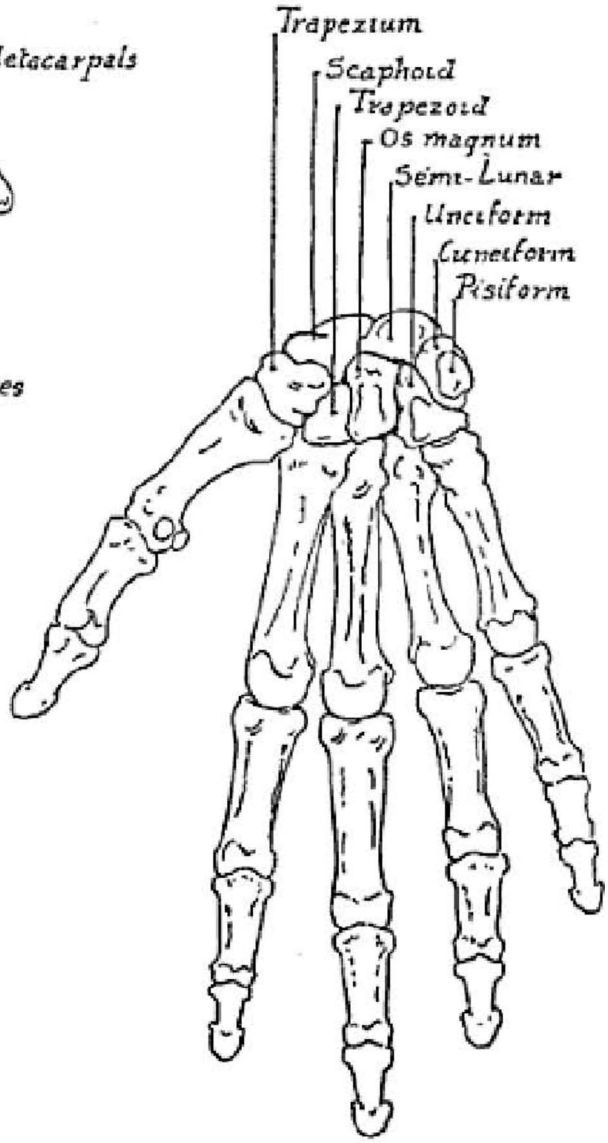
# THE HAND

# THE HAND

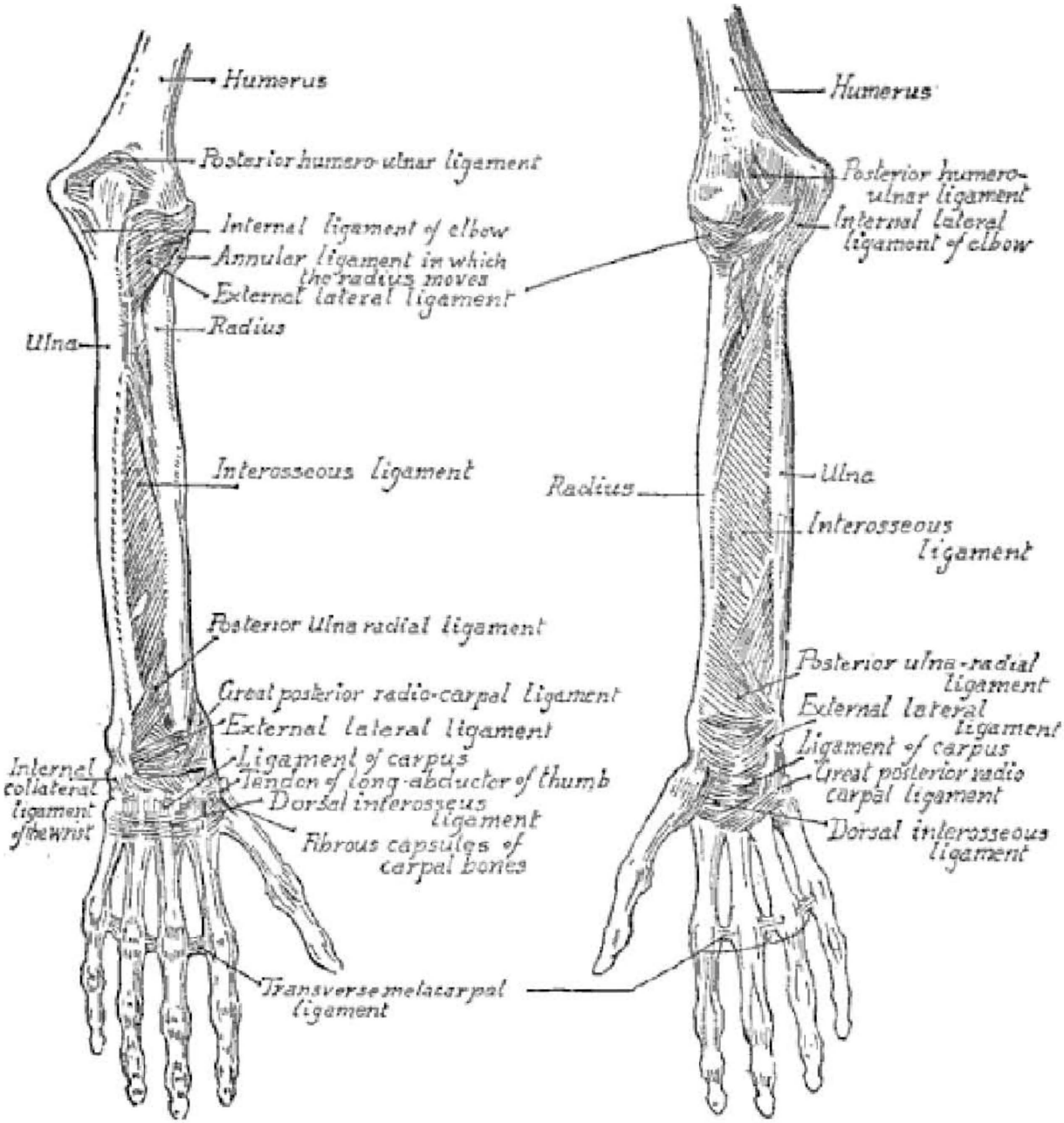

Os magnum
Unciform
Trapezoid
Semi-Lunar
Ulna
Radius
Scaphoid
Trapezium
Metacarpal of thumb
Scaphoid
Trapezium
Trapezoid
Unciform
Cuneiform
Semi-Lunar
Os magnum
Semi-Lunar
Trapezoid
Os magnum
Metacarpal bones
Phalanges
Scaphoid
Radius
Unciform
Pisiform
Cuneiform
Ulna
Scaphoid
Os magnum
Trapezoid
Radius
Ulna
Unciform
Semi-Lunar
Pisiform
Cuneiform


Os magnum
Semi-Lunar
Pisiform
Scaphoid
Cuneiform
Trapezium
Unciform
Trapezoid
Metacarpals
Phalanges
Dorsal
or
Back view

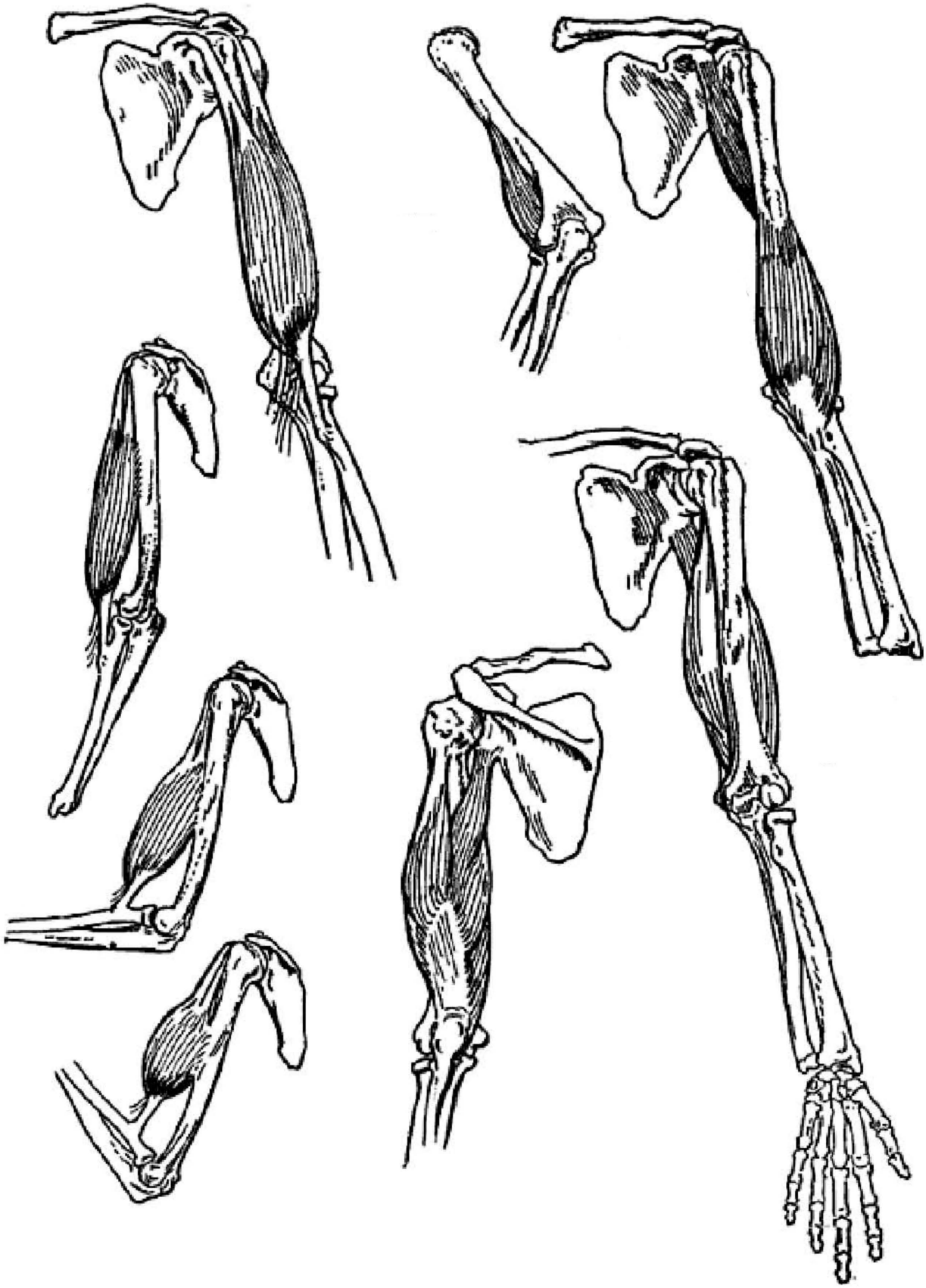

Scaphoid
Radius
Semi-Lunar
Pisiform
Trapezoid
Os magnum
Unciform
Trapezium

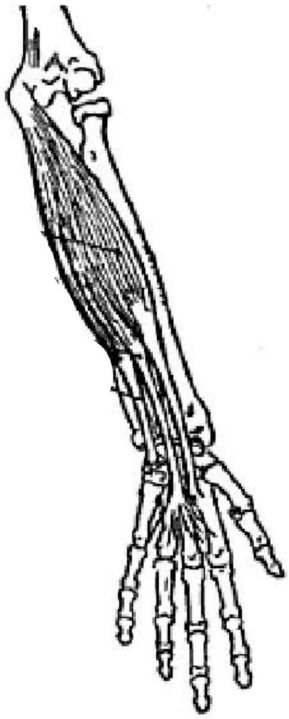

Trapezium
Scaphoid
Trapezoid
Os magnum
Semi-Lunar
Unciform
Cuneiform
Pisiform

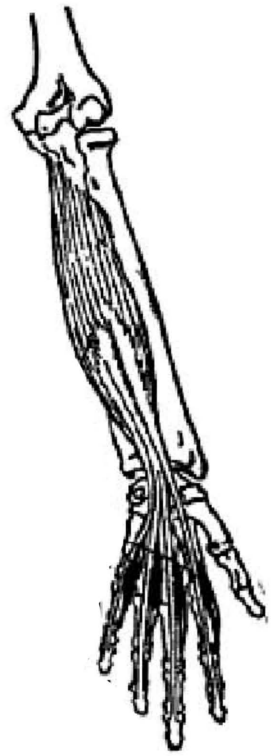
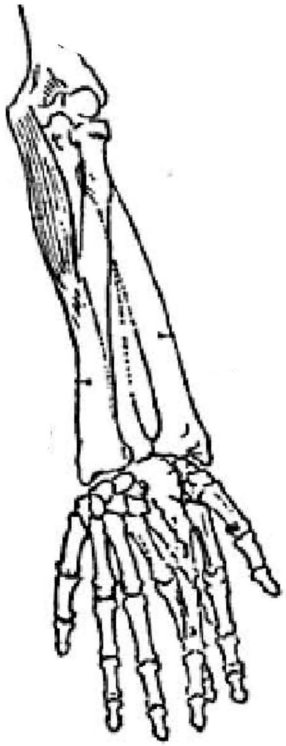
Palm view

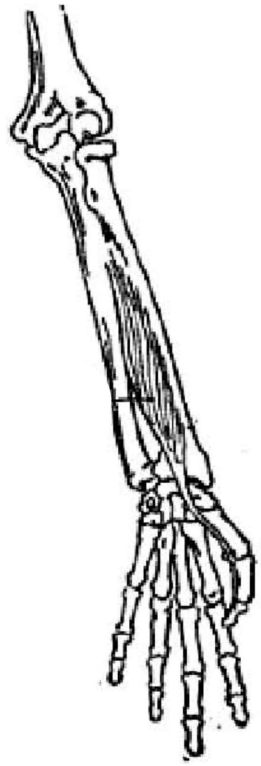


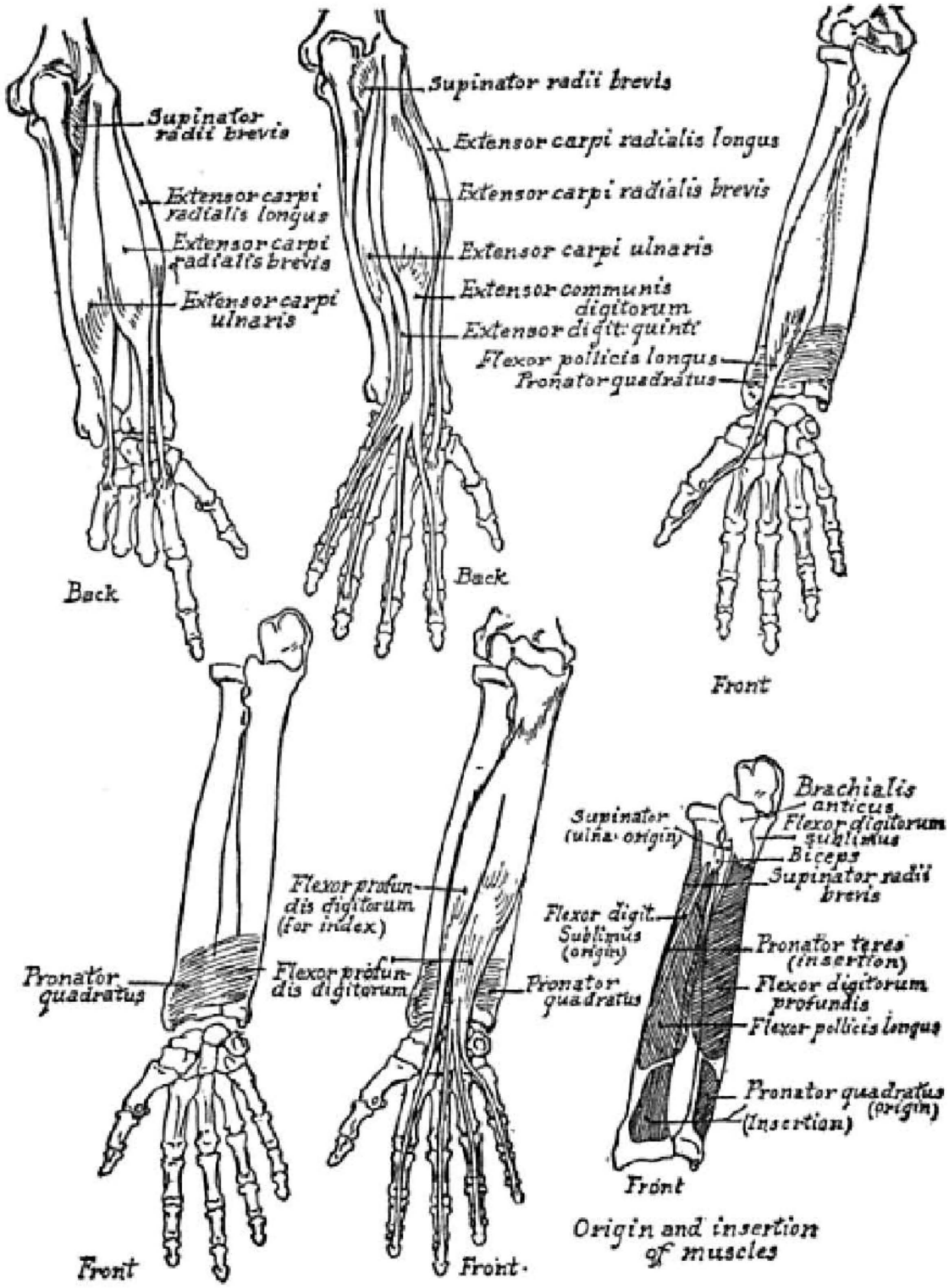

Back **Ligaments of Forearm** Front



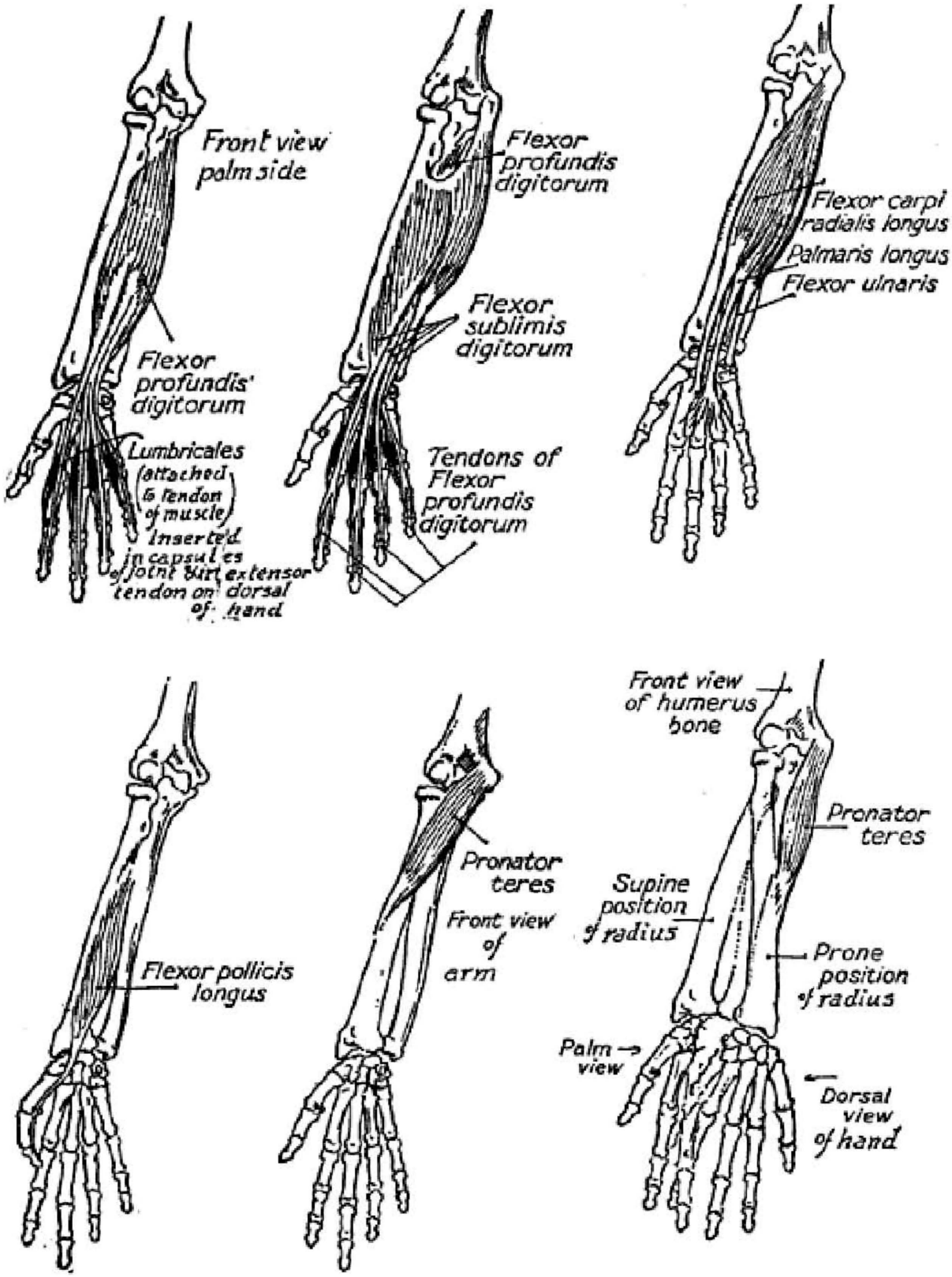


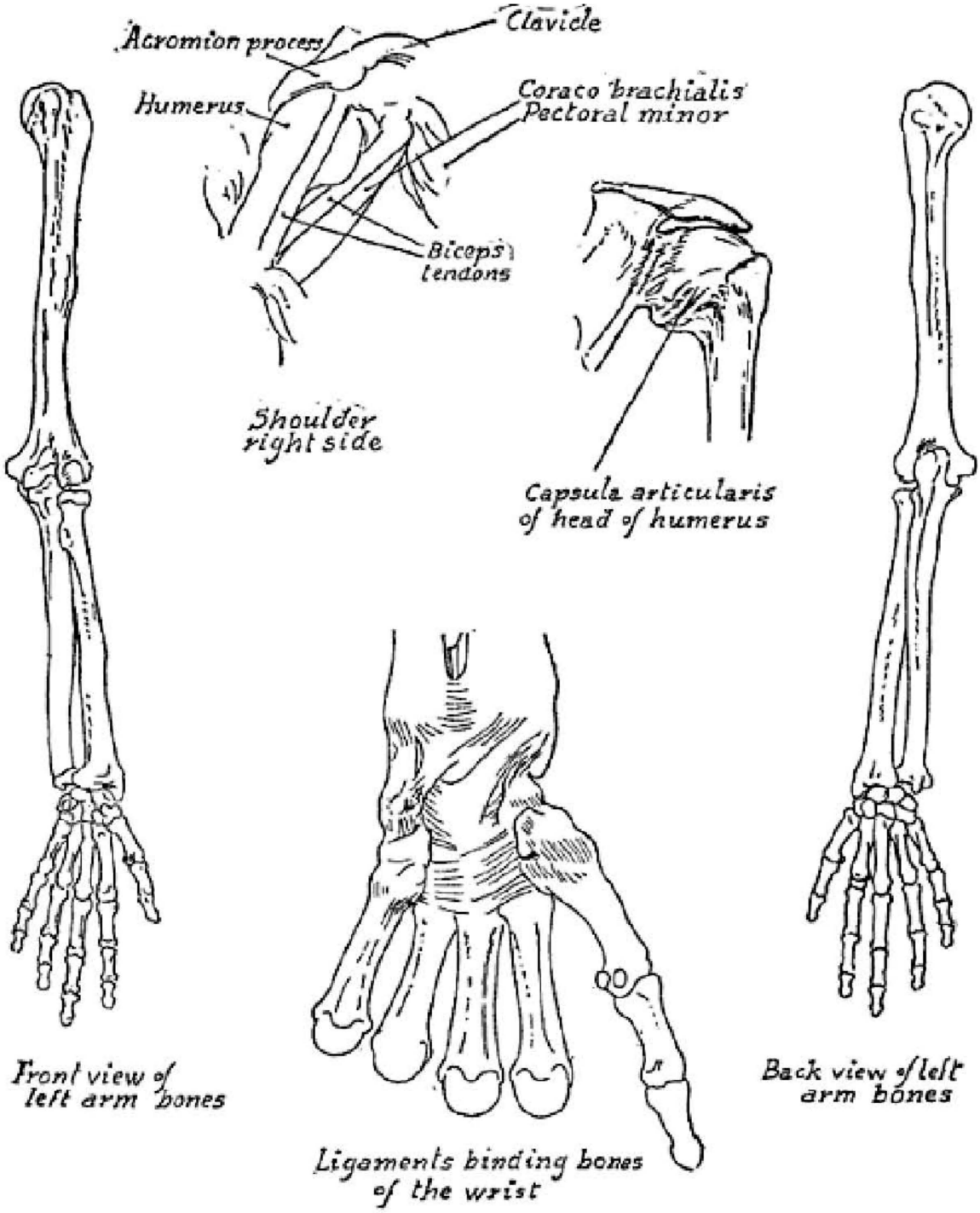



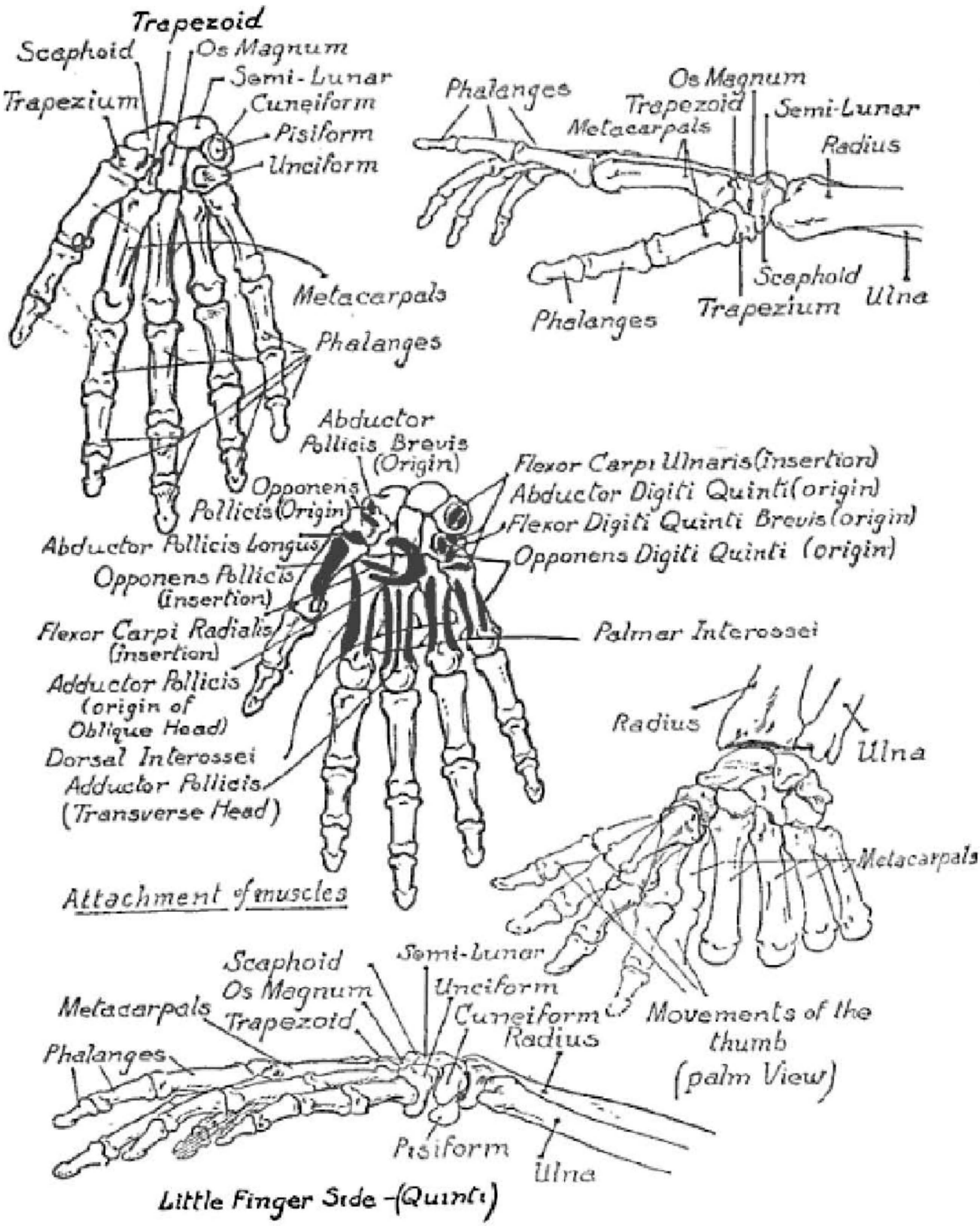


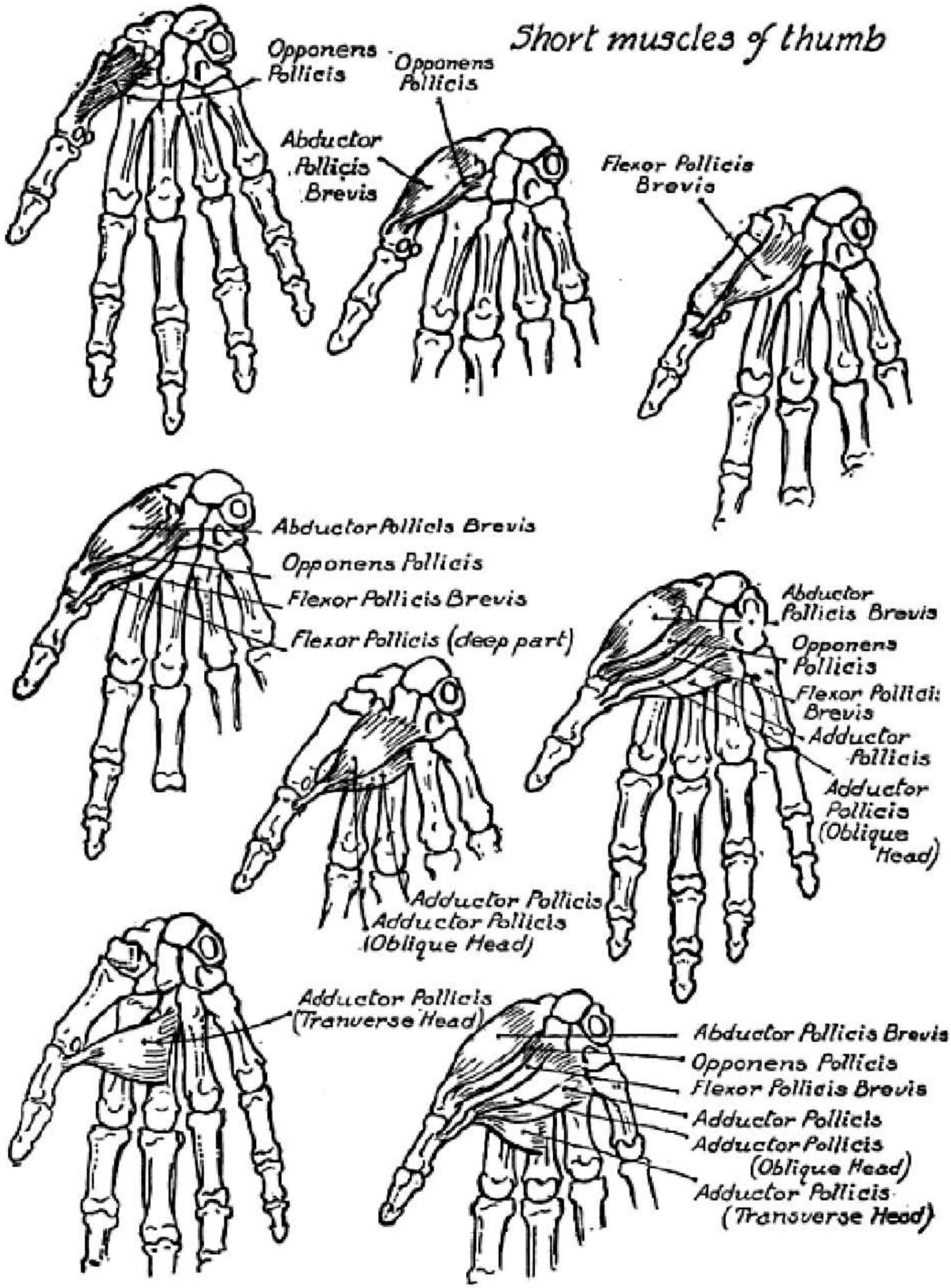


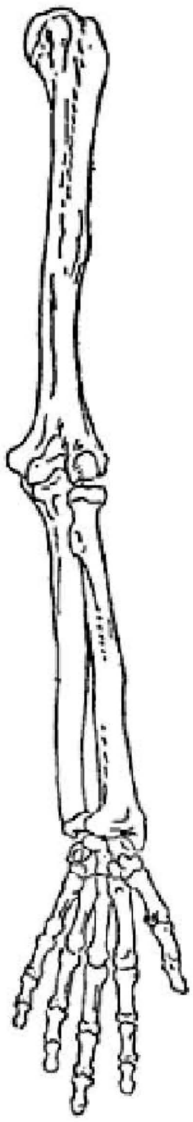

Origin and insertion of muscles


Front view palm side
Flexor profundis digitorum
Flexor sublimis digitorum
Tendons of Flexor profundis digitorum
Flexor carpi radialis longus
Palmaris longus
Flexor ulnaris
Flexor profundis digitorum
Lumbricales (attached to tendon of muscle) Inserted in capsules of joint & tendon on dorsal of hand
extensor
Flexor pollicis longus
Pronator teres
Front view of arm
Front view of humerus bone
Pronator teres
Supine position of radius
Prone position of radius
Palm view
Dorsal view of hand


Acromion process
Clavicle
Humerus
Coraco brachialis
Pectoral minor
Biceps tendons
Shoulder right side
Capsula articularis of head of humerus
Front view of left arm bones
Ligaments binding bones of the wrist
Back view of left arm bones

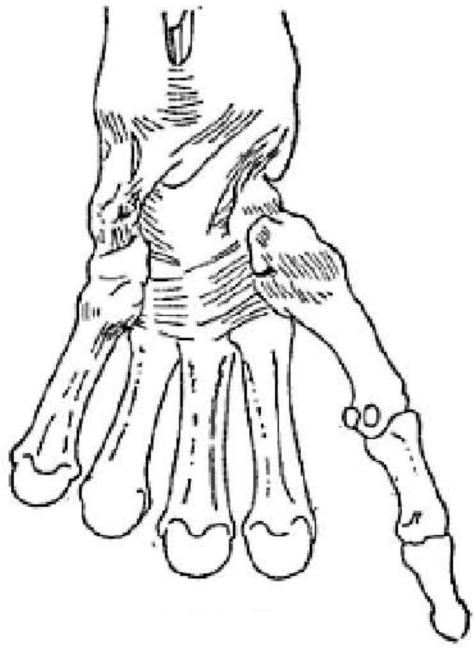

Trapezoid
Scaphoid
Os Magnum
Semi-Lunar
Trapezium
Cuneiform
Pisiform
Unciform
Metacarpals
Phalanges
Phalanges
Os Magnum
Trapezoid
Semi-Lunar
Metacarpals
Radius
Scaphoid
Ulna
Phalanges
Trapezium
Abductor Pollicis Brevis (Origin)
Opponens Pollicis (Origin)
Abductor Pollicis Longus
Opponens Pollicis (insertion)
Flexor Carpi Radialis (insertion)
Adductor Pollicis (origin of Oblique Head)
Dorsal Interossei
Adductor Pollicis (Transverse Head)
Flexor Carpi Ulnaris (insertion)
Abductor Digiti Quinti (origin)
Flexor Digiti Quinti Brevis (origin)
Opponens Digiti Quinti (origin)
Palmer Interossei
Attachment of muscles
Radius
Ulna
Metacarpals
Movements of the thumb (palm View)
Scaphoid
Os Magnum
Trapezoid
Semi-Lunar
Unciform
Cuneiform
Radius
Metacarpals
Phalanges
Pisiform
Ulna
Little Finger Side -(Quinti)

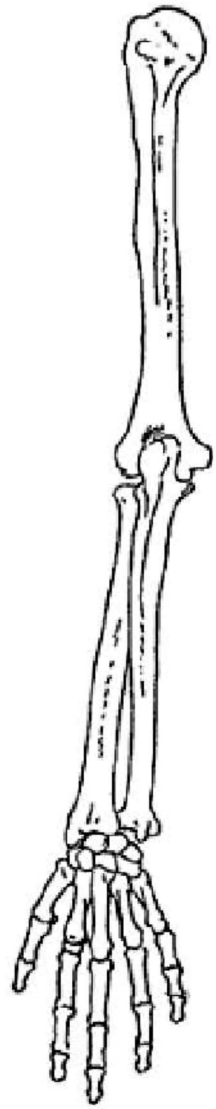

Short muscles of thumb
Opponens Pollicis
Opponens Pollicis
Abductor Pollicis Brevis
Flexor Pollicis Brevis
Abductor Pollicis Brevis
Opponens Pollicis
Flexor Pollicis Brevis
Flexor Pollicis (deep part)
Abductor Pollicis Brevis
Opponens Pollicis
Flexor Pollicis Brevis
Adductor Pollicis
Adductor Pollicis (Oblique Head)
Adductor Pollicis
Adductor Pollicis (Oblique Head)
Adductor Pollicis (Tranverse Head)
Abductor Pollicis Brevis
Opponens Pollicis
Flexor Pollicis Brevis
Adductor Pollicis
Adductor Pollicis (Oblique Head)
Adductor Pollicis (Transverse Head)

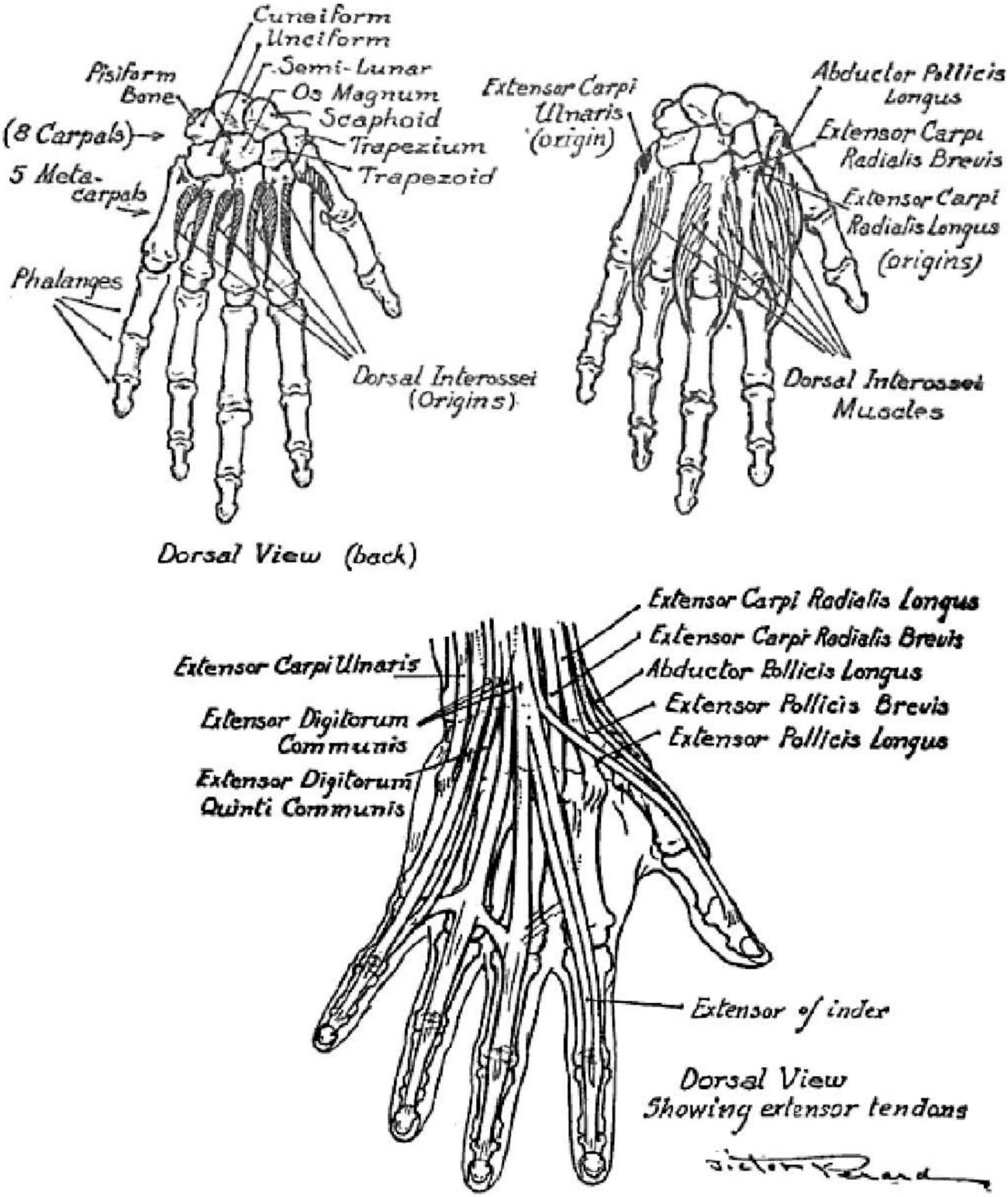


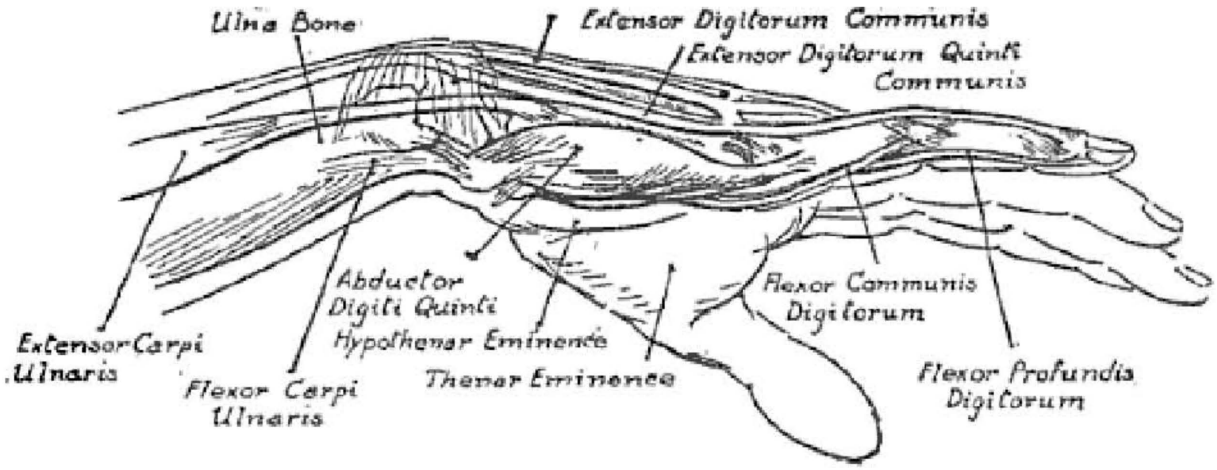


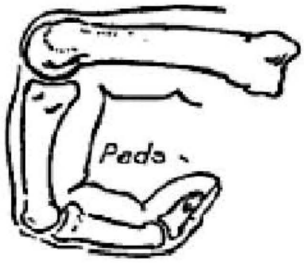




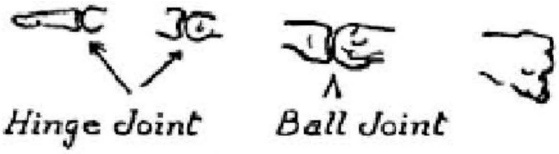


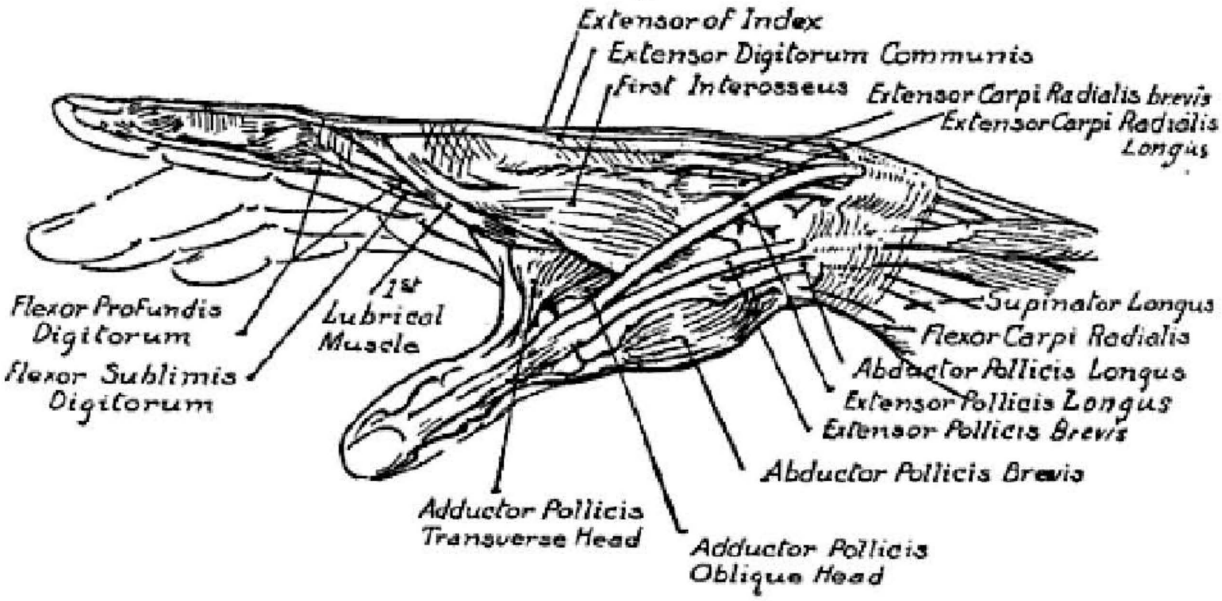

Cuneiform
Uneiform
Semi-Lunar
Os Magnum
Scaphoid
Trapezium
Trapezoid
Pisiform Bone
(8 Carpals)
5 Meta-carpals
Phalanges
Dorsal Interossei (Origins)
Dorsal View (back)
Extensor Carpi Ulnaris (origin)
Abductor Pollicis Longus
Extensor Carpi Radialis Brevis
Extensor Carpi Radialis Longus (origins)
Dorsal Interossei Muscles
Extensor Carpi Radialis Longus
Extensor Carpi Radialis Brevis
Extensor Carpi Ulnaris
Abductor Pollicis Longus
Extensor Digitorum Communis
Extensor Pollicis Brevis
Extensor Digitorum Quinti Communis
Extensor Pollicis Longus
Extensor of index
Dorsal View
Showing extensor tendons

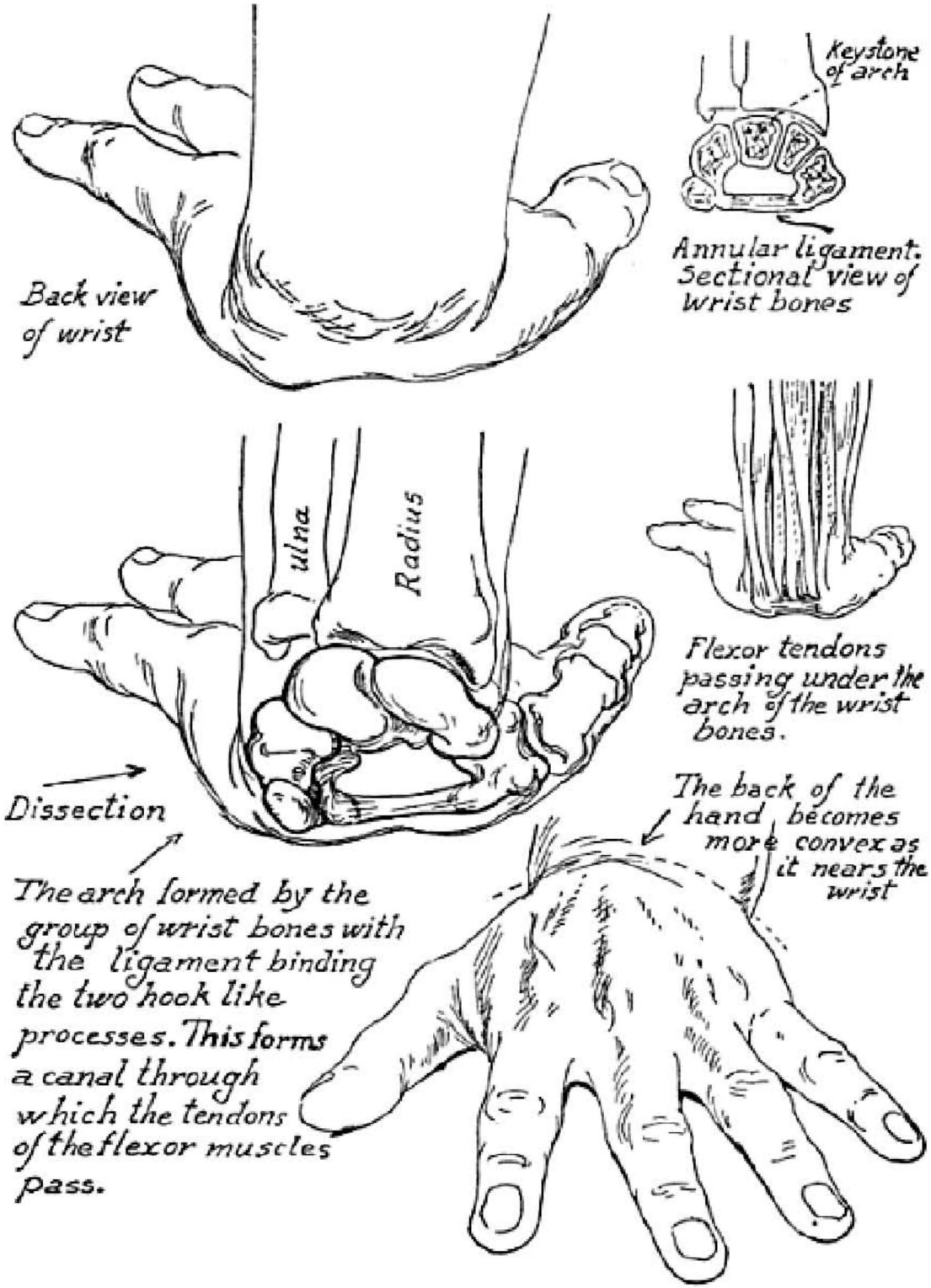

Ulna Bone
Extensor Digitorum Communis
Extensor Digitorum Quinti Communis
Abductor Digiti Quinti
Hypothenar Eminence
Thenar Eminence
Flexor Communis Digitorum
Extensor Carpi Ulnaris
Flexor Carpi Ulnaris
Flexor Profundis Digitorum

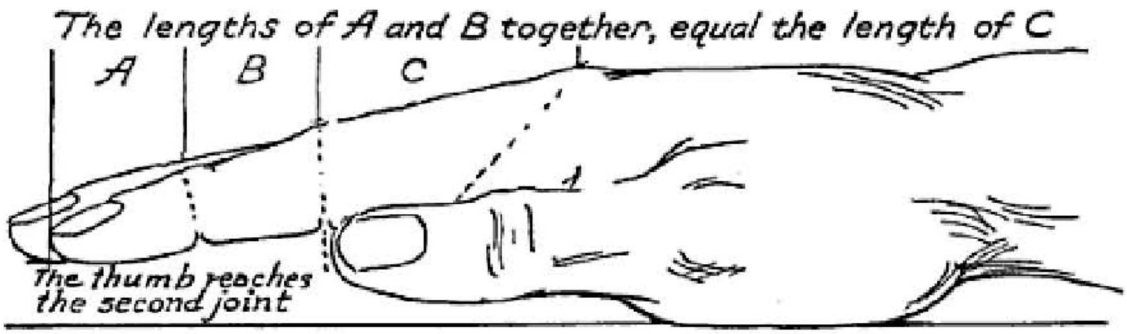

Pads


3 Pads
Ligaments of Finger Joints

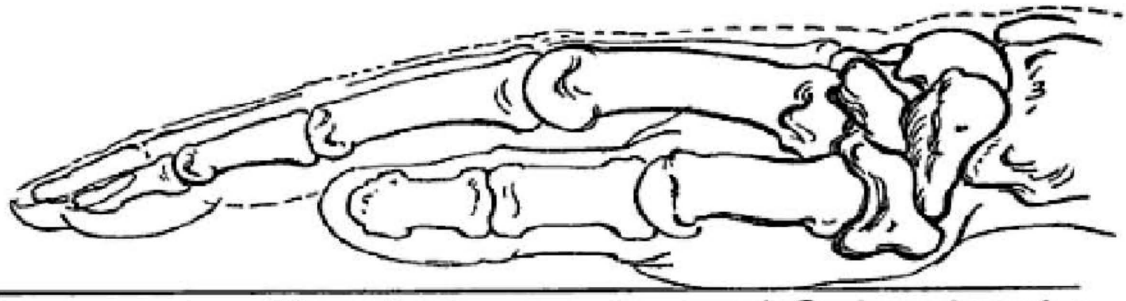

Hinge Joint
Ball Joint


Extensor of Index
Extensor Digitorum Communis
First Interosseus
Extensor Carpi Radialis brevis
Extensor Carpi Radialis Longus
Flexor Profundis Digitorum
Flexor Sublimis Digitorum
1st Lubrical Muscle
Supinator Longus
Flexor Carpi Radialis
Abductor Pollicis Longus
Extensor Pollicis Longus
Extensor Pollicis Brevis
Abductor Pollicis Brevis
Adductor Pollicis Transverse Head
Adductor Pollicis Oblique Head

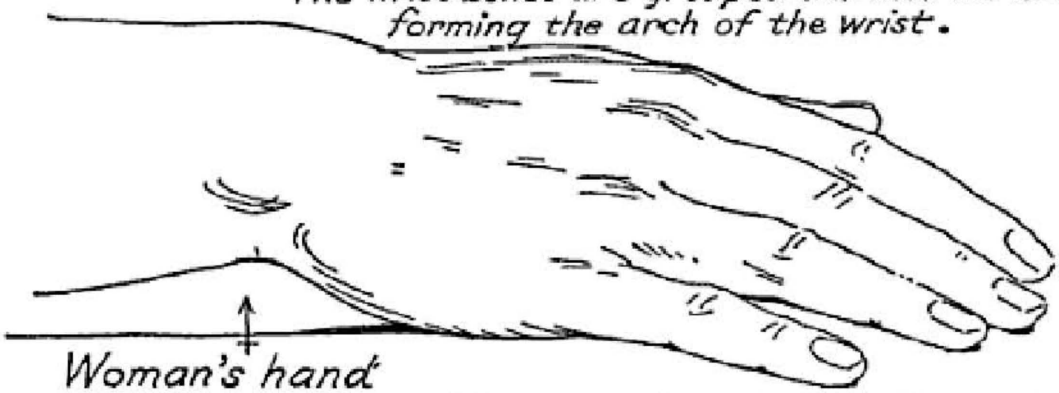

Keystone of arch
Annular ligament. Sectional view of wrist bones
Back view of wrist
Ulna
Radius
Flexor tendons passing under the arch of the wrist bones.
Dissection
The back of the hand becomes more convex as it nears the wrist
The arch formed by the group of wrist bones with the ligament binding the two hook like processes. This forms a canal through which the tendons of the flexor muscles pass.




When the hand is resting on a flat surface, the wrist does not come in contact with that surface.

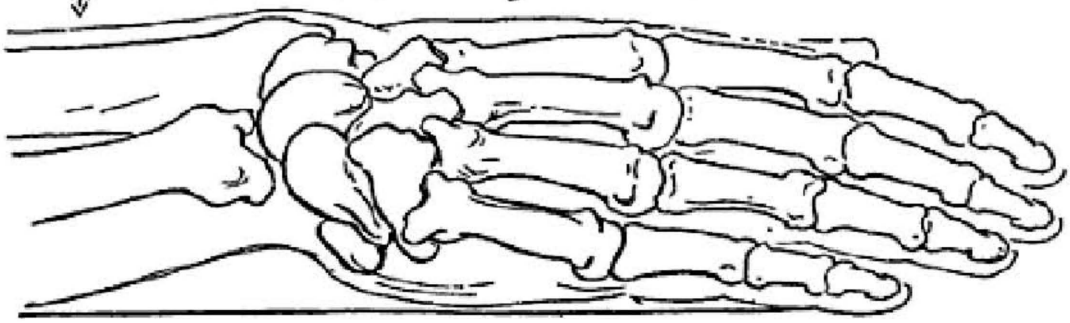


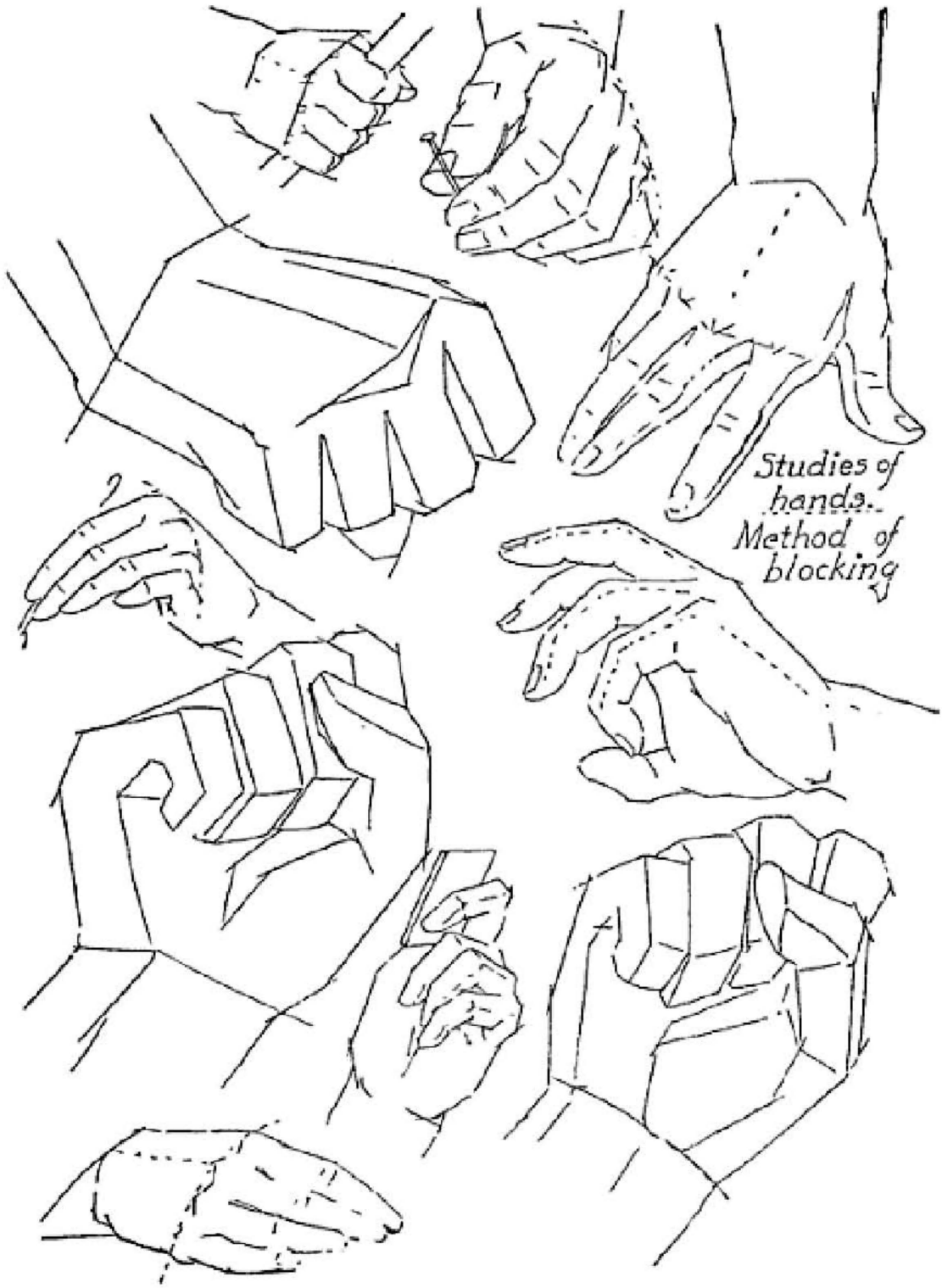
The wrist bones are grouped far into the wrist forming the arch of the wrist.

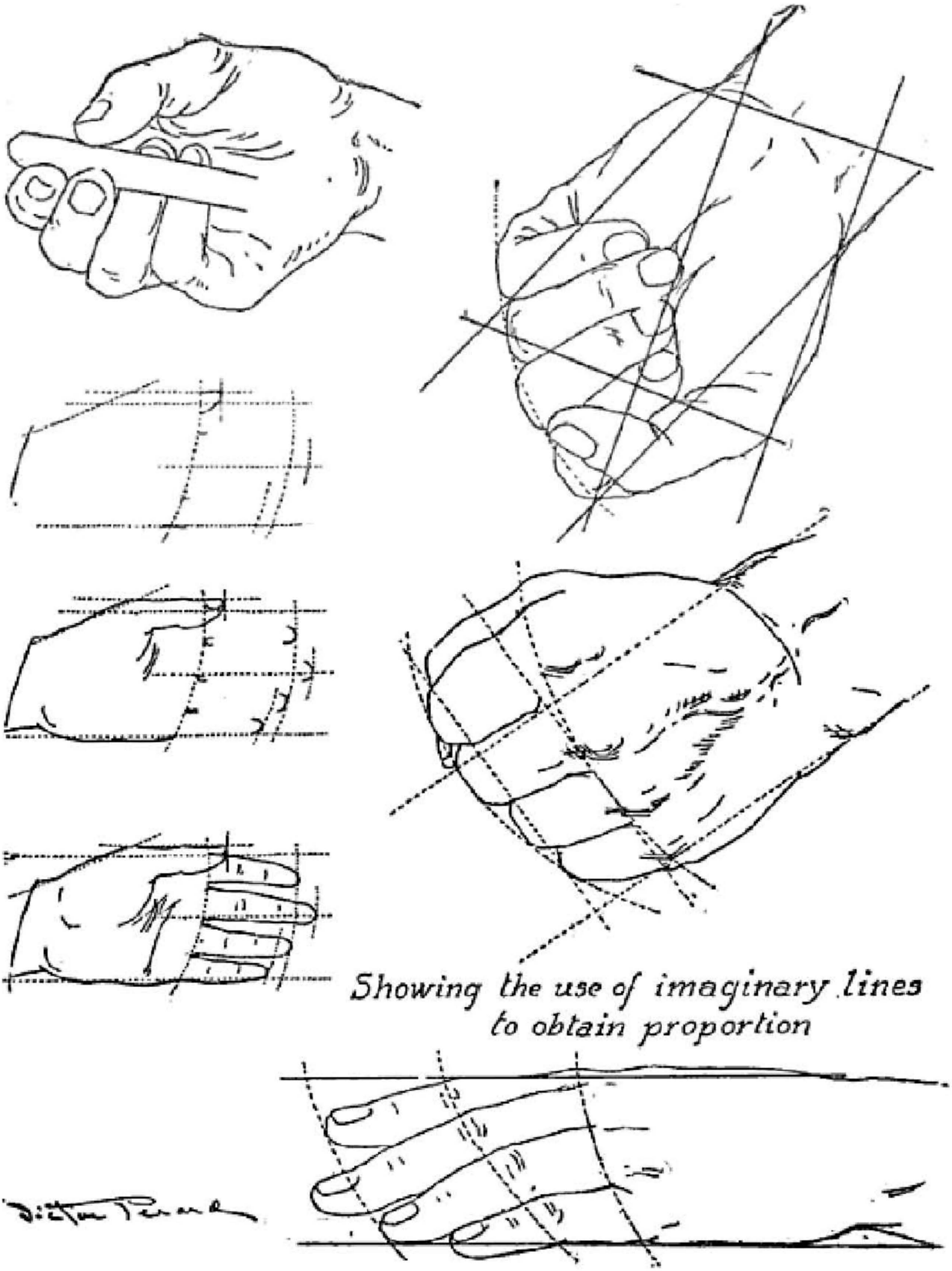


Woman's hand

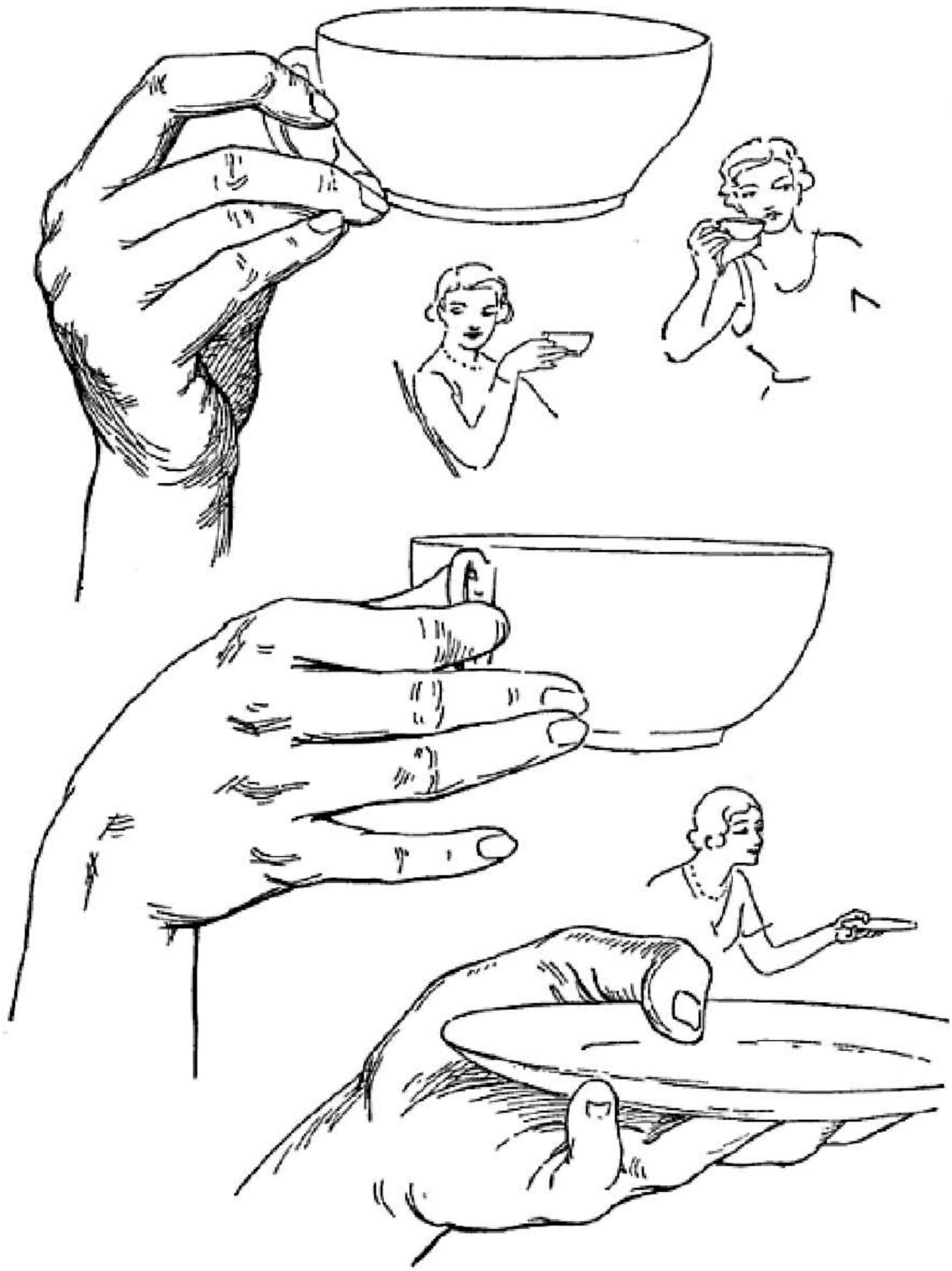
Relative positions of the bones from the little finger side when the hand is resting on a flat surface.



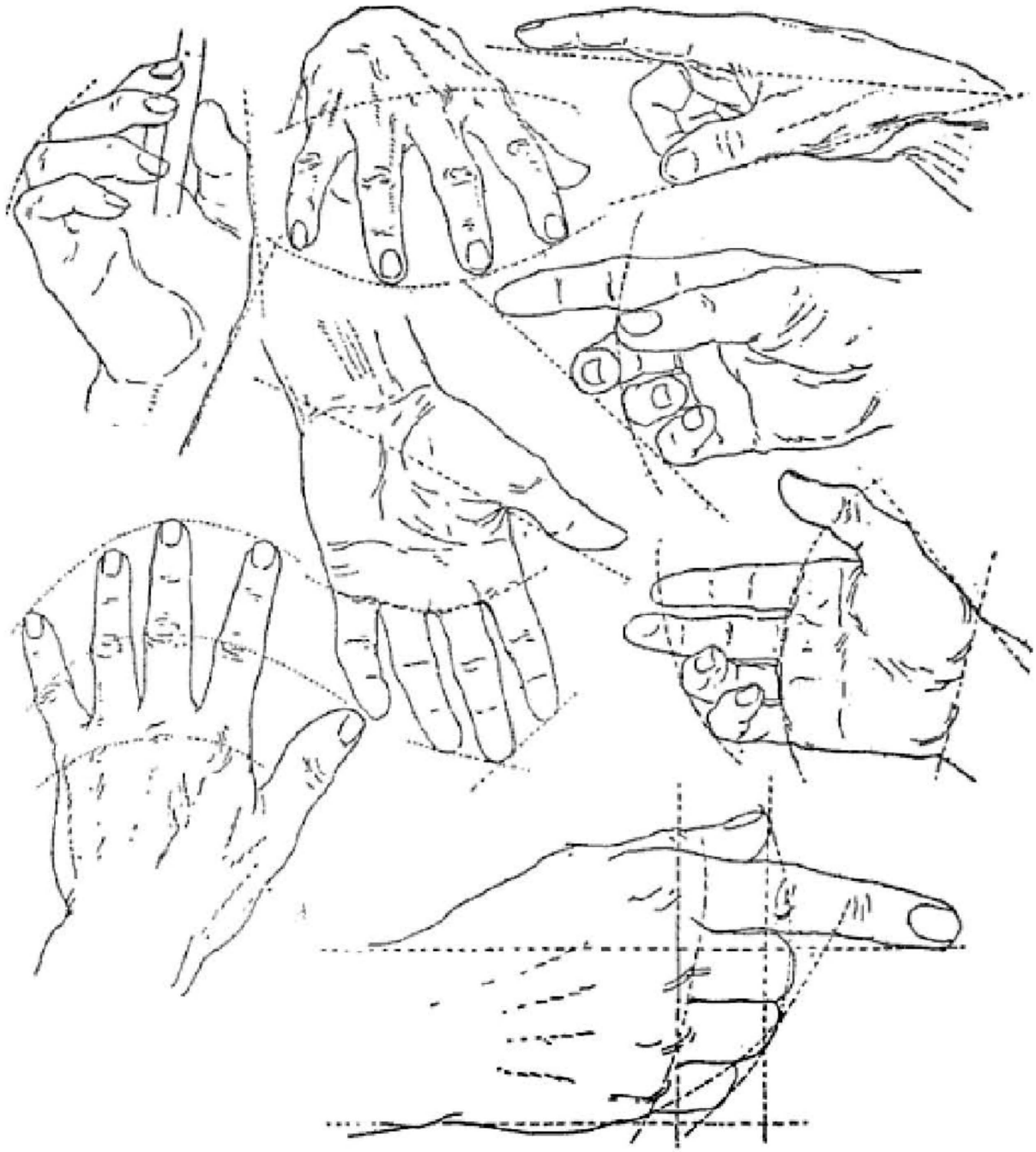

Studies of hands. Method of blocking



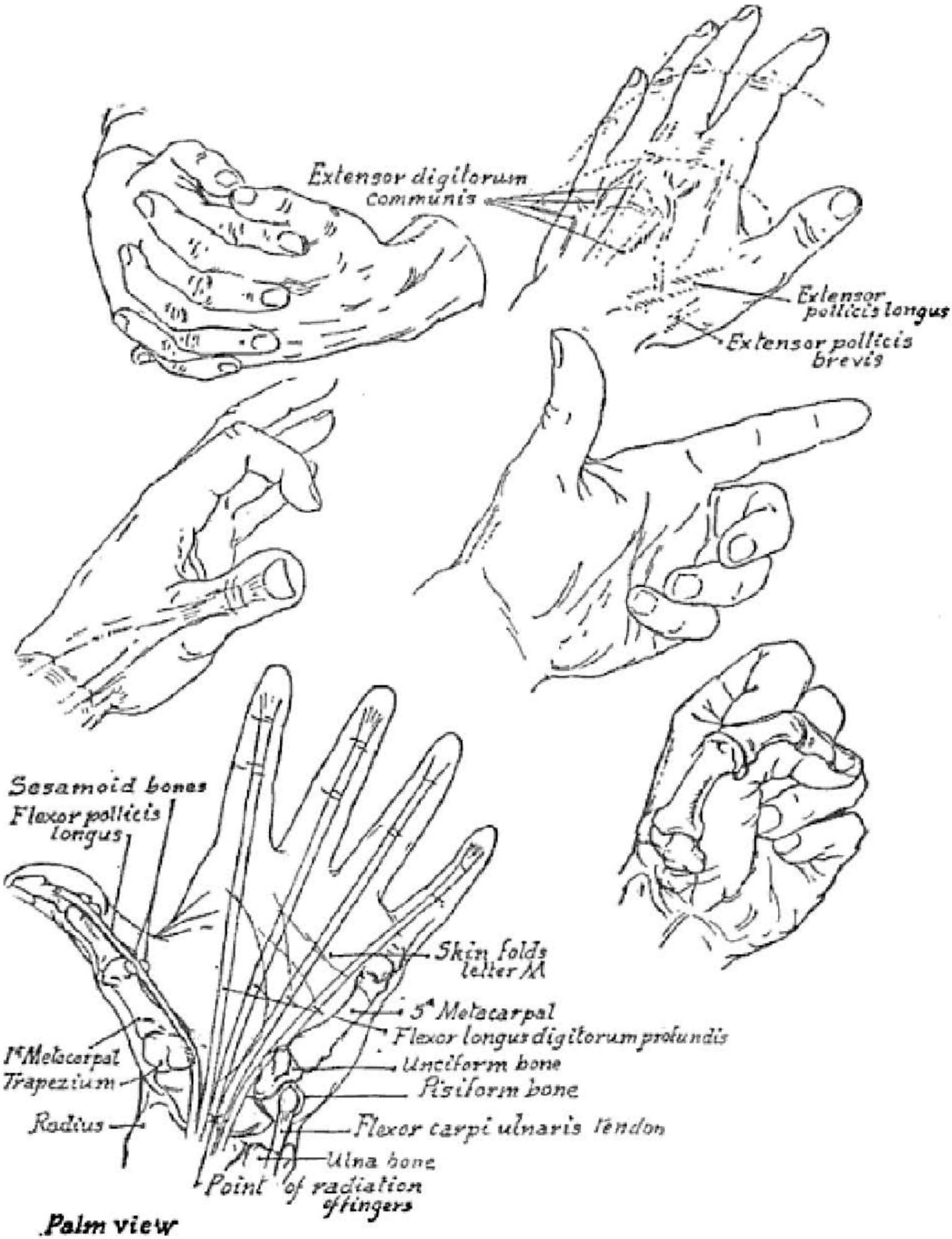
*Showing the use of imaginary lines to obtain proportion*



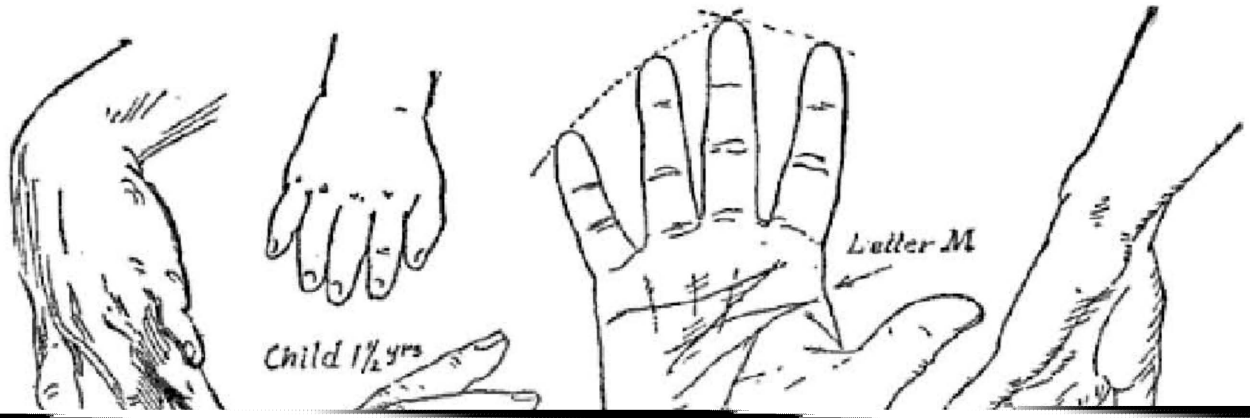


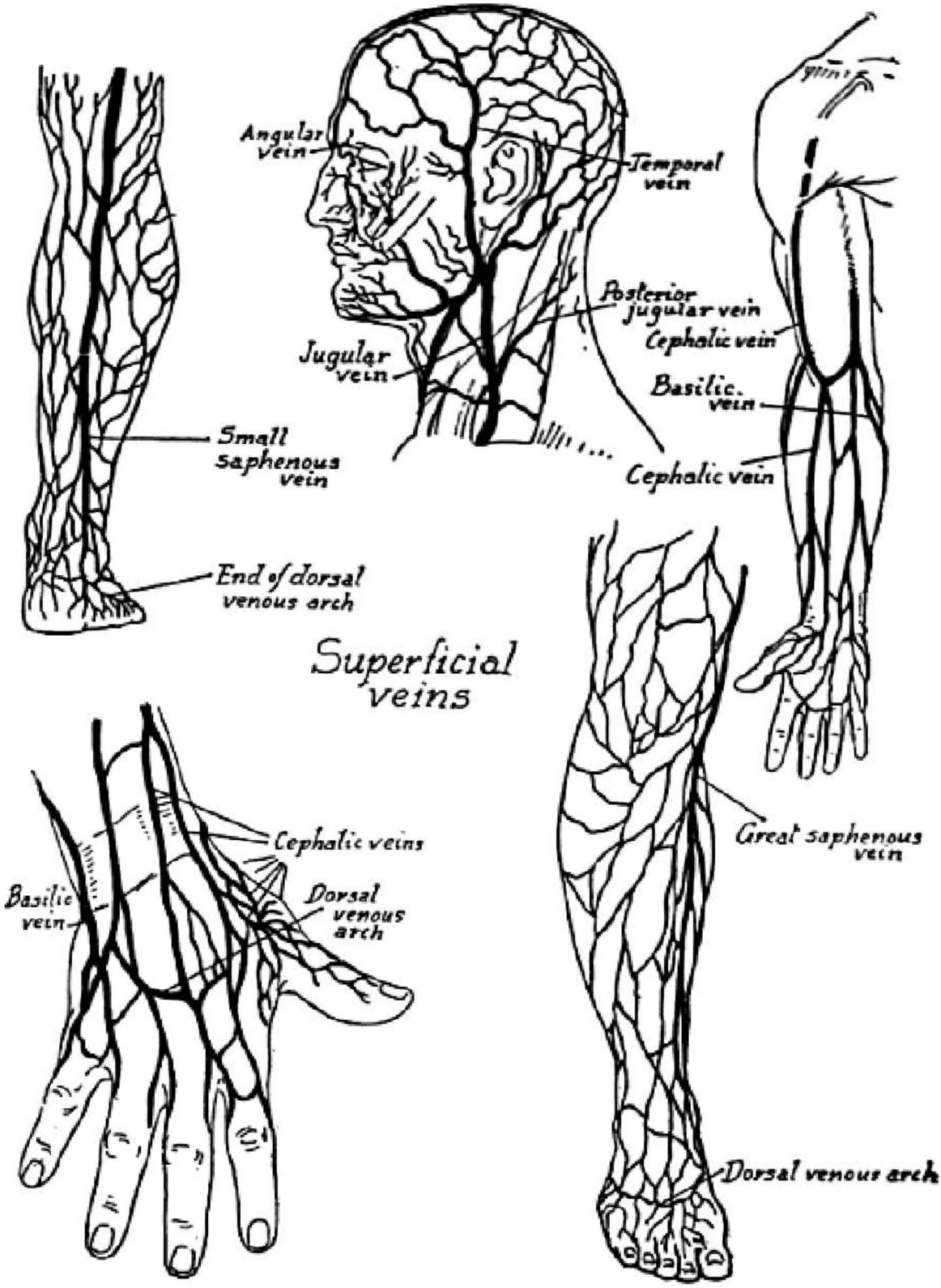


*Studies of hands with use of imaginary lines for proportion*


Extensor digitorum communis
Extensor pollicis longus
Extensor pollicis brevis
Sesamoid bones
Flexor pollicis longus
Skin folds letter M
5th Metacarpal
Flexor longus digitorum profundis
Unciform bone
Pisiform bone
Flexor carpi ulnaris tendon
Ulna bone
Point of radiation of fingers
1st Metacarpal
Trapezium
Radius

**Palm view**

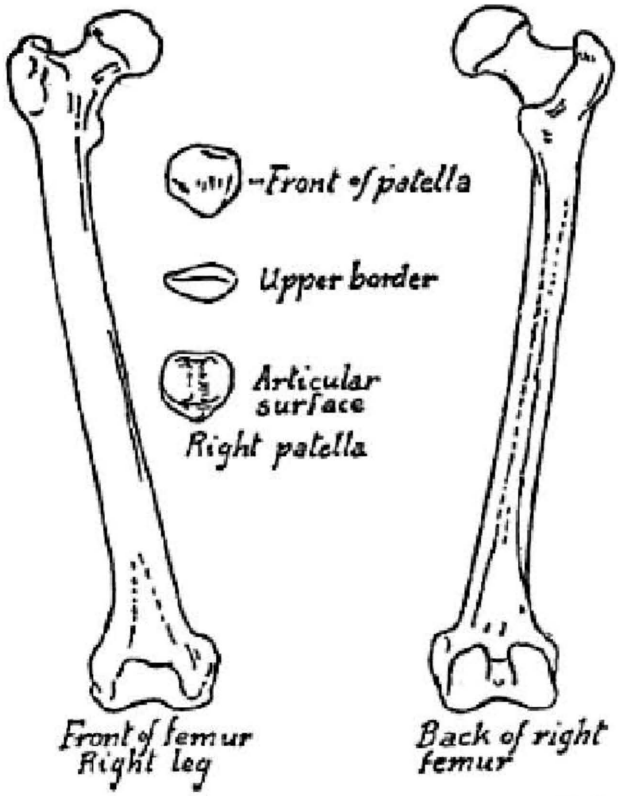

Child 1½ yrs
Letter M


Angular vein
Temporal vein
Posterior jugular vein
Cephalic vein
Jugular vein
Basilic vein
Small saphenous vein
Cephalic vein
End of dorsal venous arch
Superficial veins
Cephalic veins
Basilic vein
Dorsal venous arch
Great saphenous vein
Dorsal venous arch

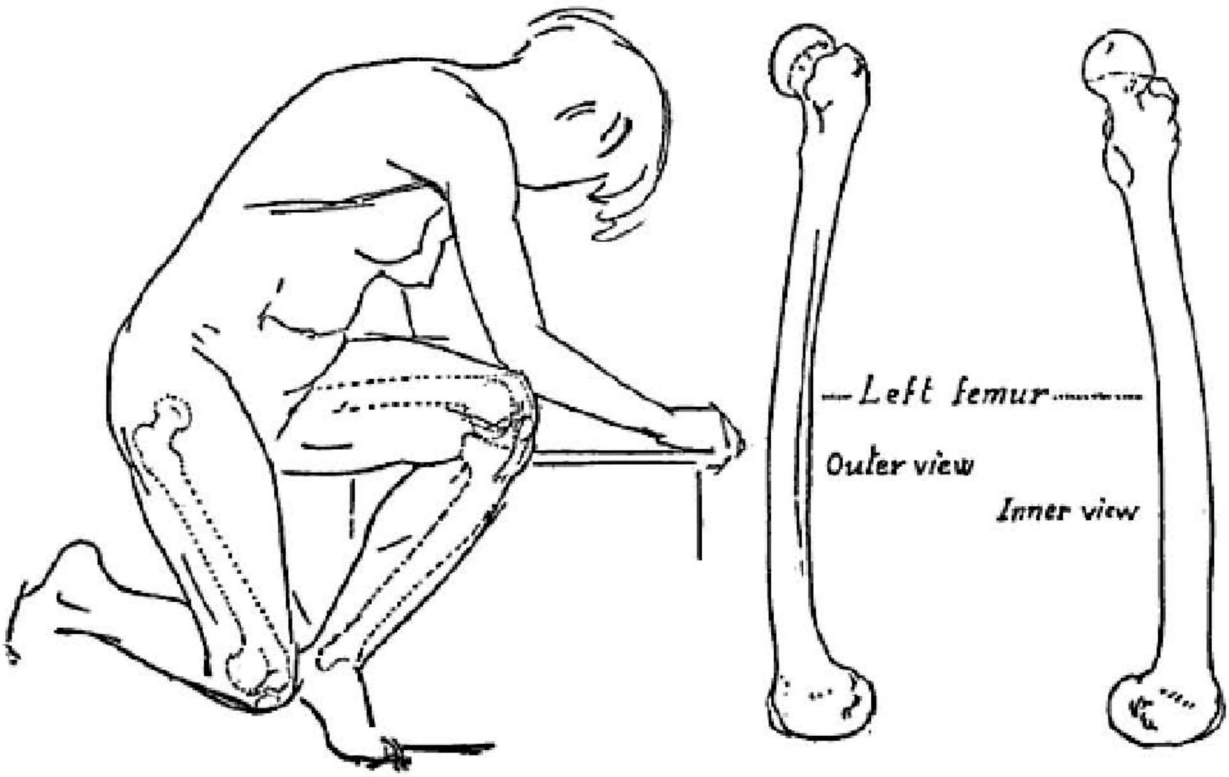


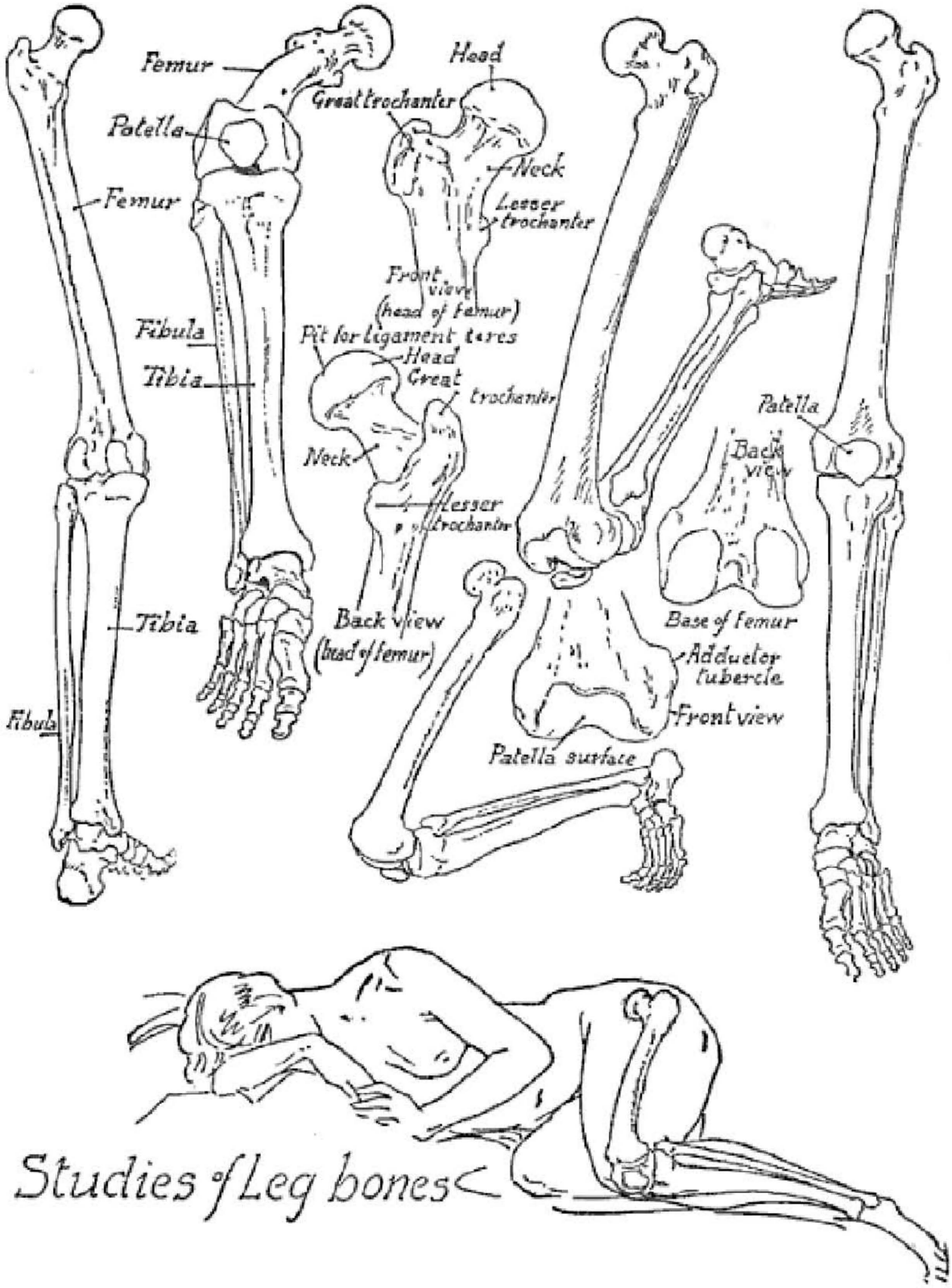
# PART SEVEN

# THE LEG

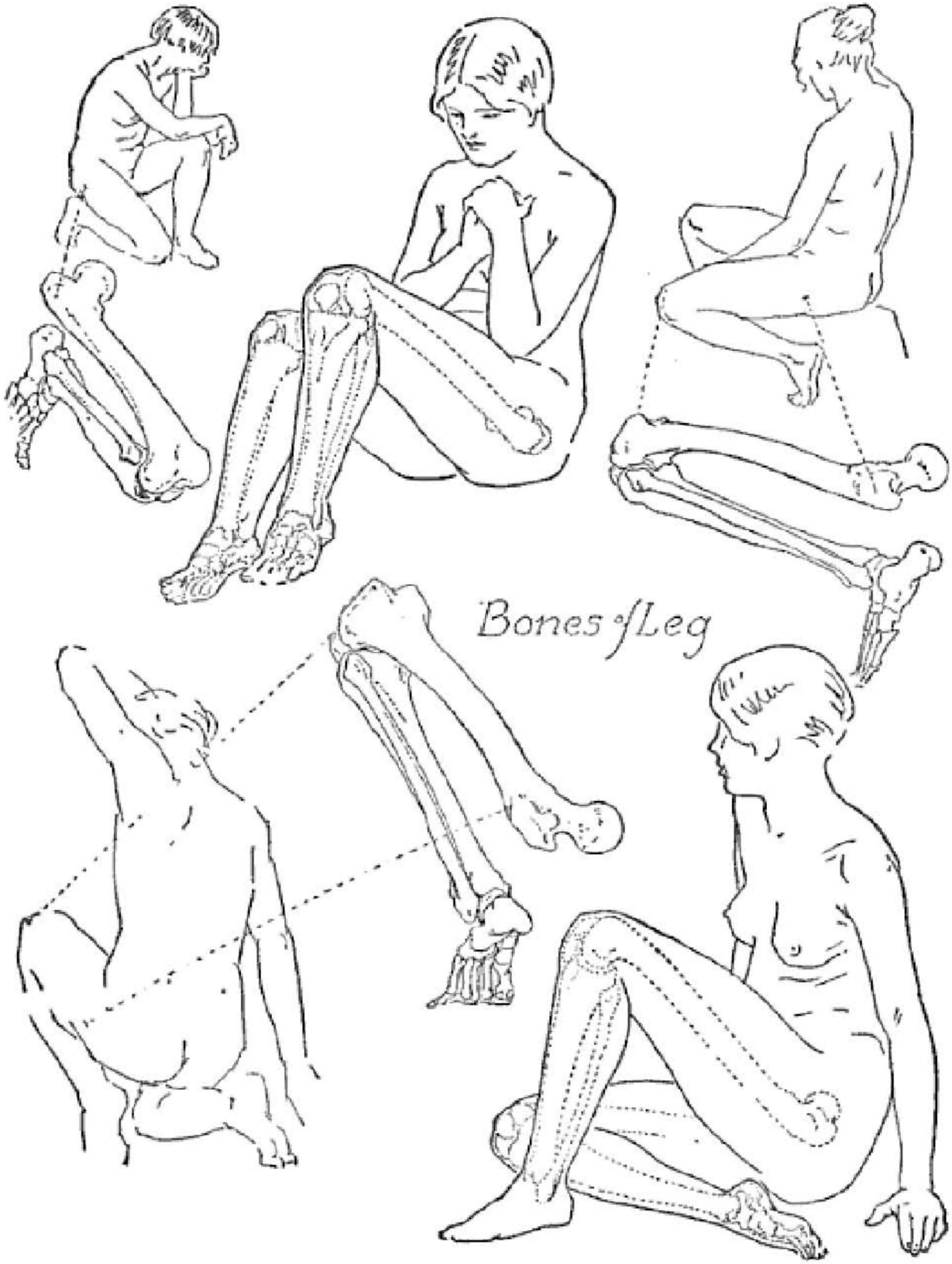

Front of patella
Upper border
Articular surface
Right patella
Front of femur
Right leg
Back of right femur



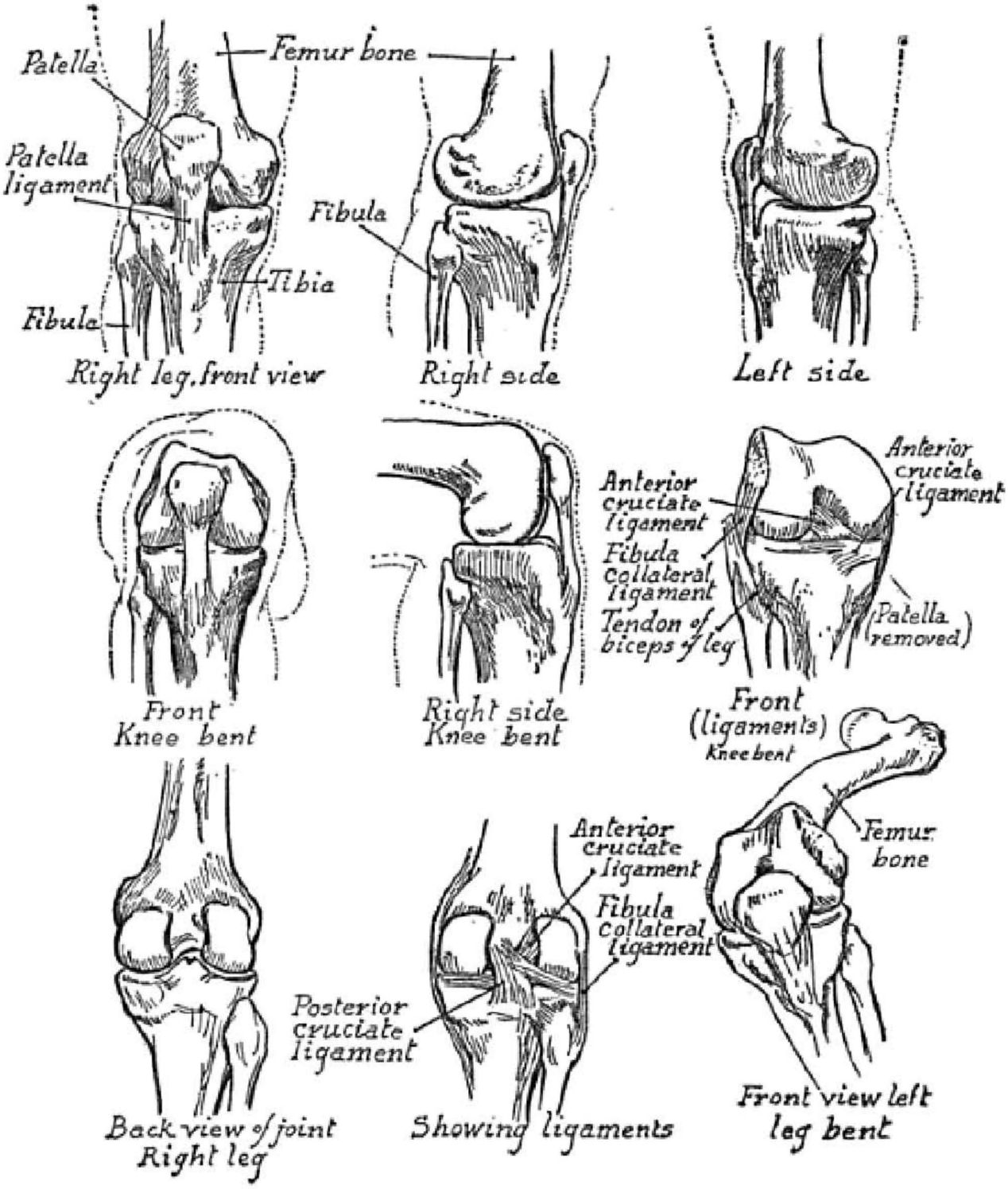

Left femur
Outer view
Inner view

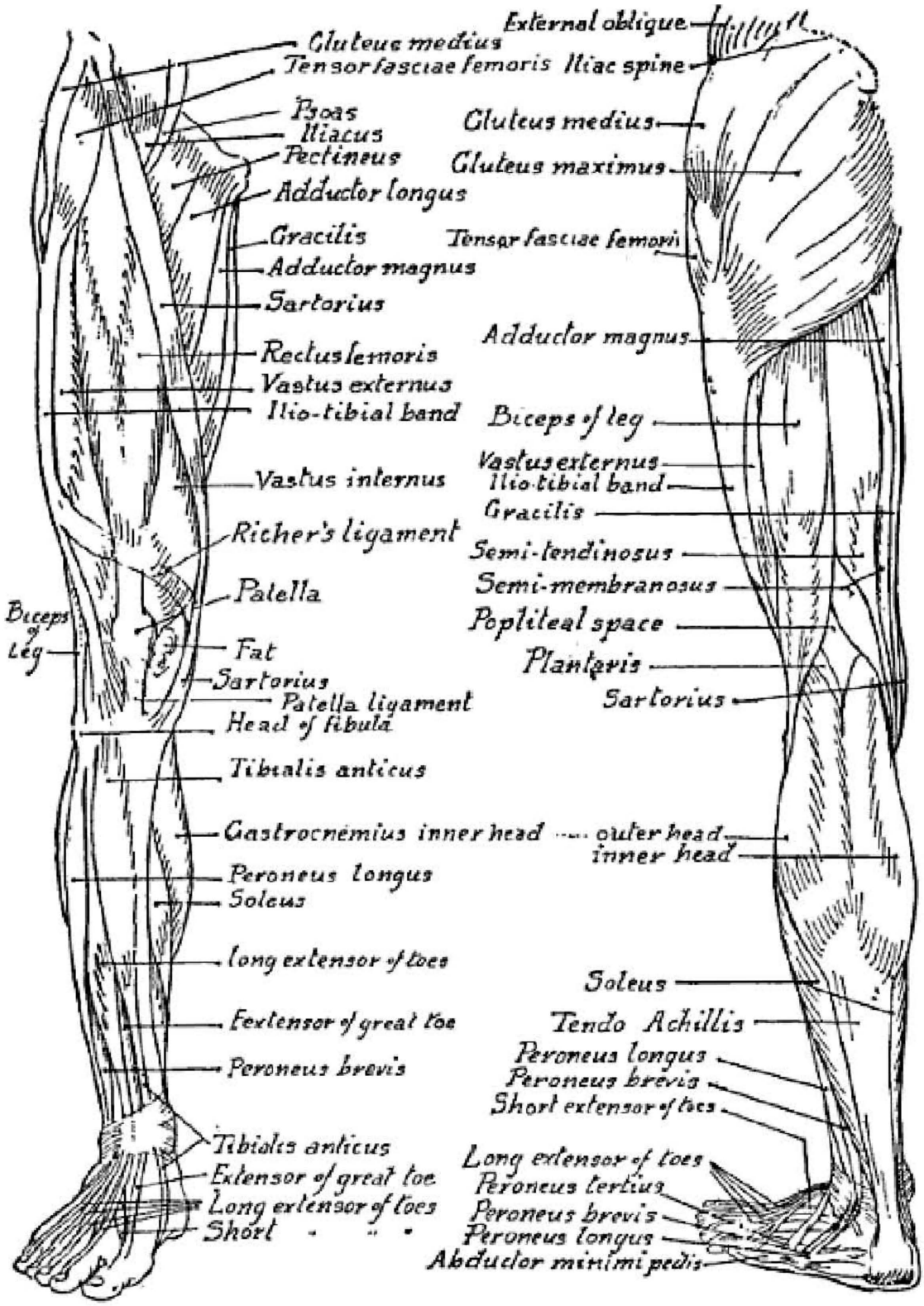


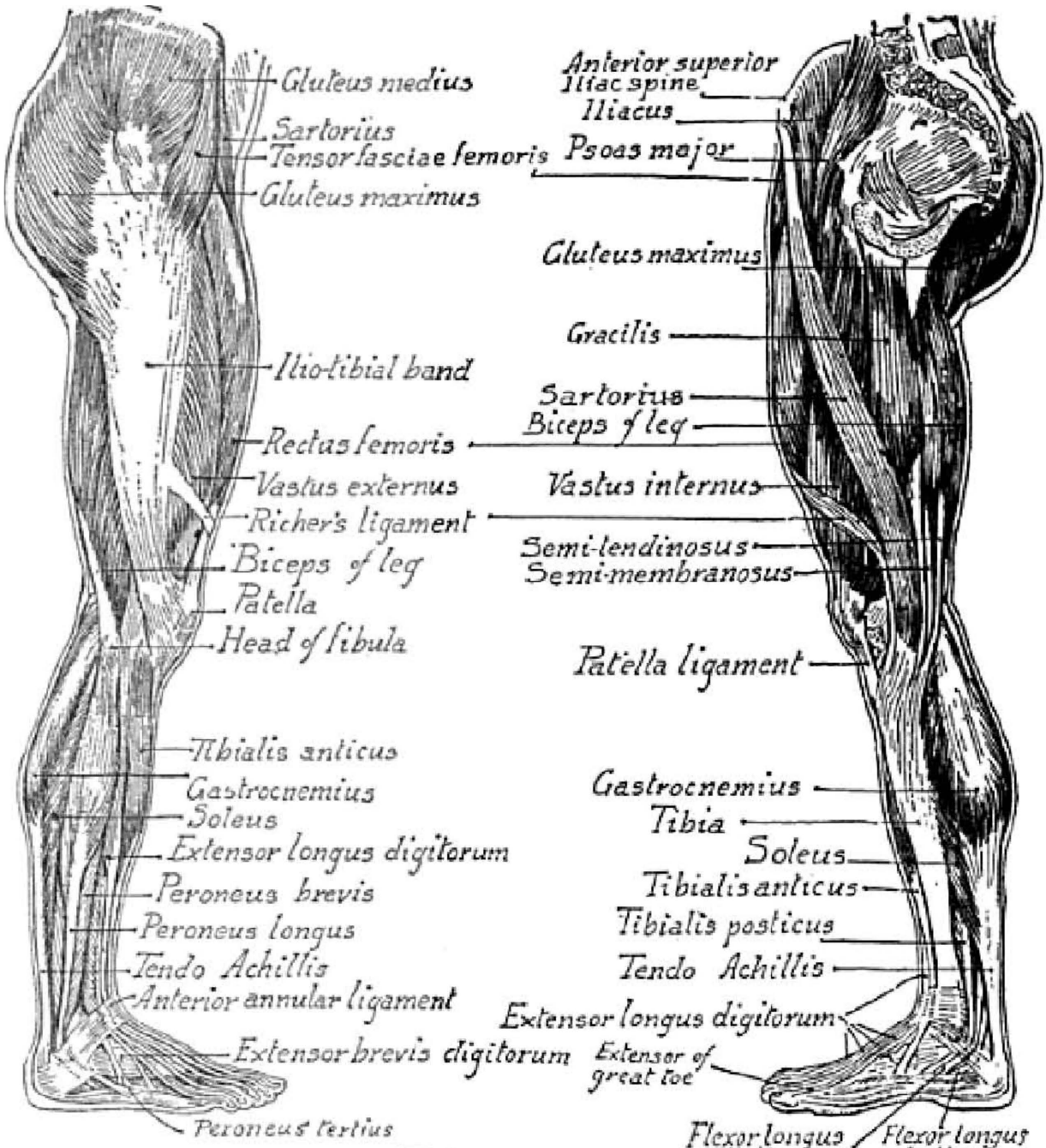

Studies of Leg bones


Bones of Leg

# The Knee Joint



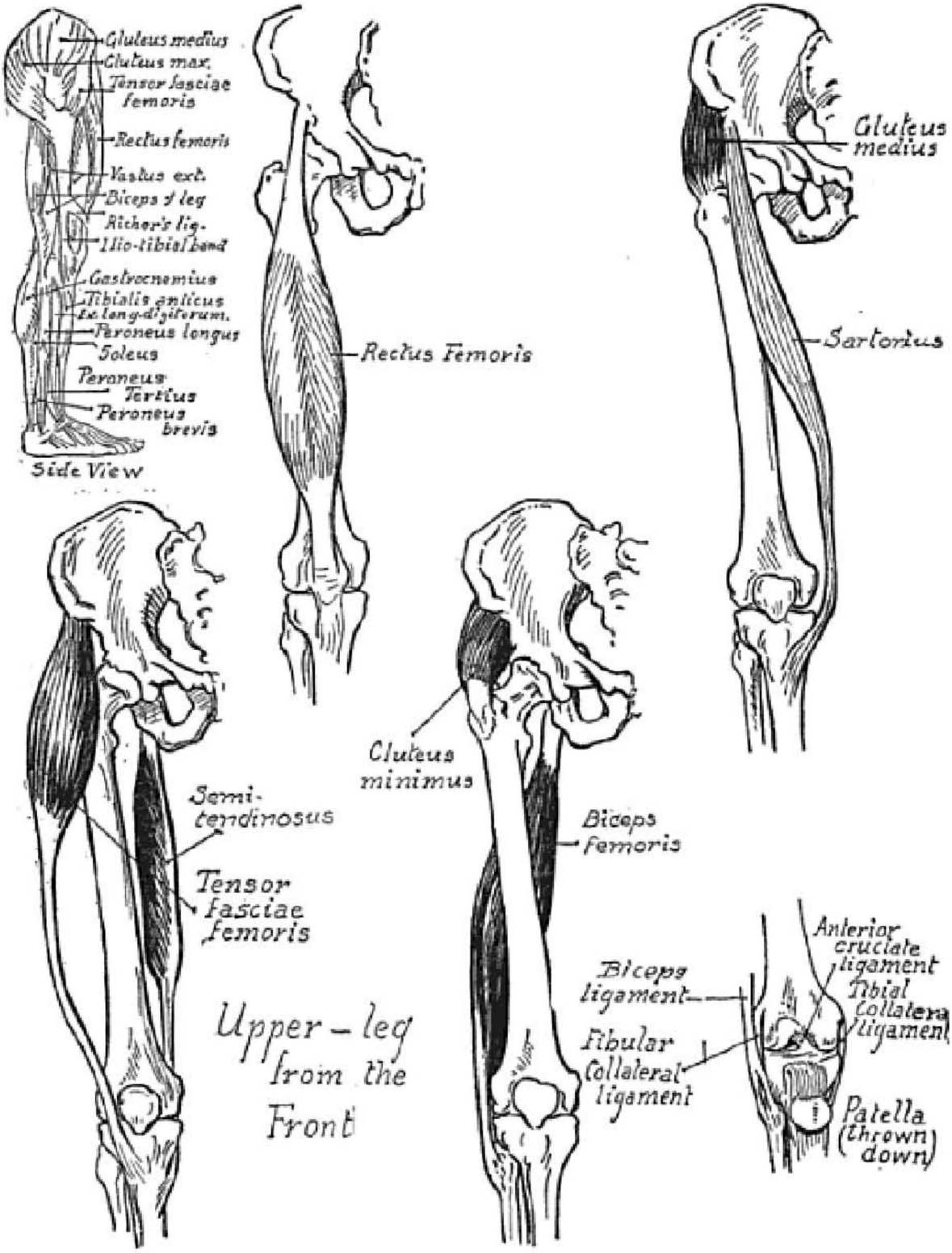

Gluteus medius
Tensor fasciae femoris
Psoas
Iliacus
Pectineus
Adductor longus
Gracilis
Adductor magnus
Sartorius
Rectus femoris
Vastus externus
Ilio-tibial band
Vastus internus
Richer's ligament
Patella
Biceps of Leg
Fat
Sartorius
Patella ligament
Head of fibula
Tibialis anticus
Gastrocnemius inner head
Peroneus longus
Soleus
long extensor of toes
Extensor of great toe
Peroneus brevis
Tibialis anticus
Extensor of great toe
Long extensor of toes
Short
External oblique
Iliac spine
Gluteus medius
Gluteus maximus
Tensor fasciae femoris
Adductor magnus
Biceps of leg
Vastus externus
Ilio-tibial band
Gracilis
Semi-tendinosus
Semi-membranosus
Popliteal space
Plantaris
Sartorius
outer head
inner head
Soleus
Tendo Achillis
Peroneus longus
Peroneus brevis
Short extensor of toes
Long extensor of toes
Peroneus tertius
Peroneus brevis
Peroneus longus
Abductor minimi pedis

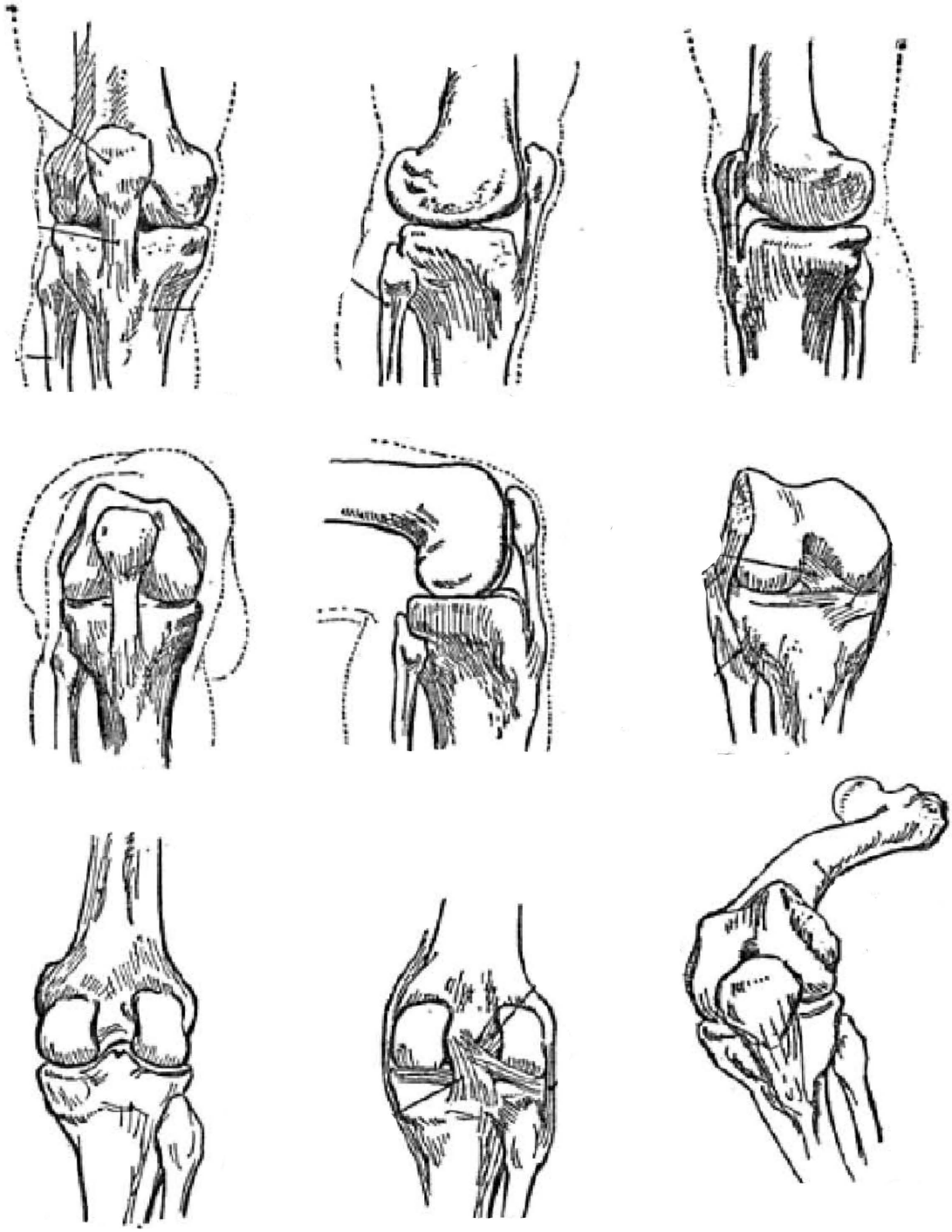


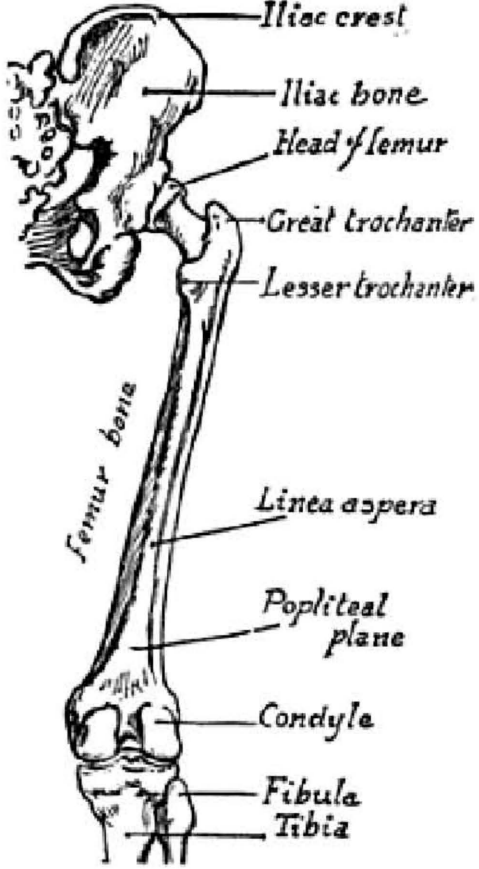

Outer view

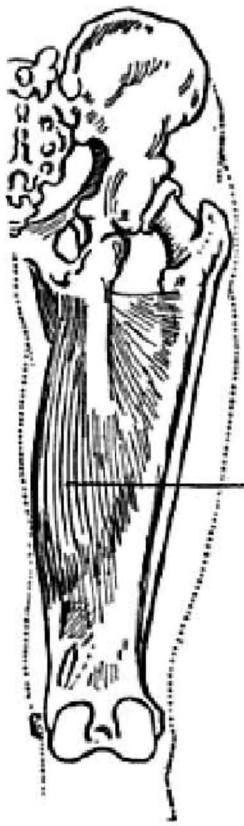
# The leg

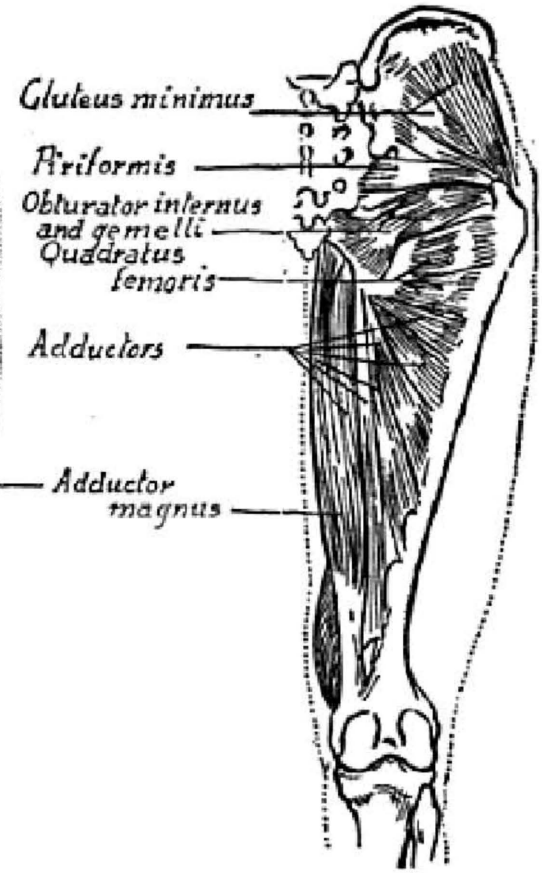
Inner view

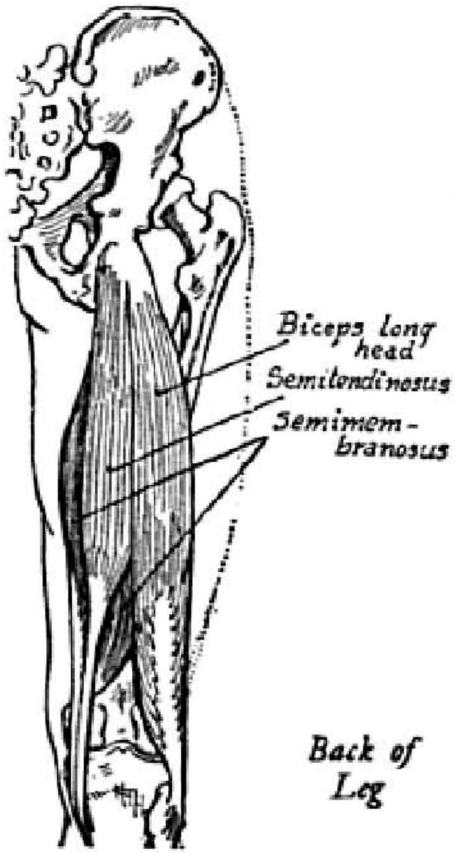

Gluteus medius
Gluteus max.
Tensor fasciae femoris
Rectus femoris
Vastus ext.
Biceps of leg
Richet's lig.
Ilio-tibial band
Gastrocnemius
Tibialis anticus
Ex. long. digitorum.
Peroneus longus
Soleus
Peroneus Tertius
Peroneus brevis
Side View
Rectus Femoris
Gluteus medius
Sartorius
Semi-tendinosus
Tensor fasciae femoris
Upper-leg from the Front
Gluteus minimus
Biceps femoris
Biceps ligament
Fibular Collateral ligament
Anterior cruciate ligament
Tibial Collateral ligament
Patella (thrown down)



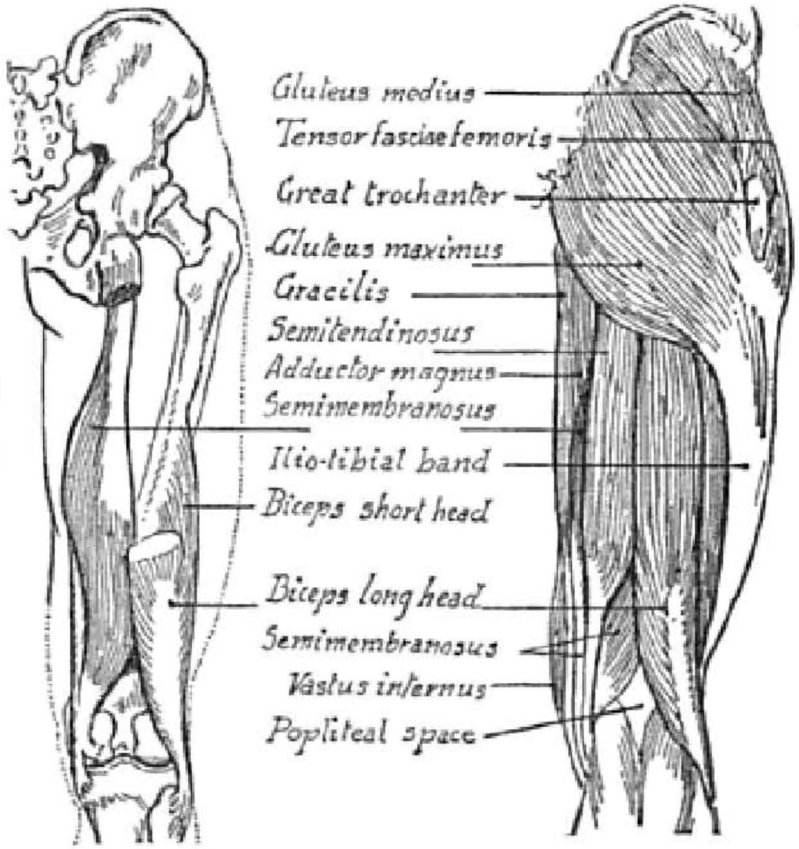

Iliac crest
Iliac bone
Head of femur
Great trochanter
Lesser trochanter
Femur bone
Linea aspera
Popliteal plane
Condyle
Fibula
Tibia

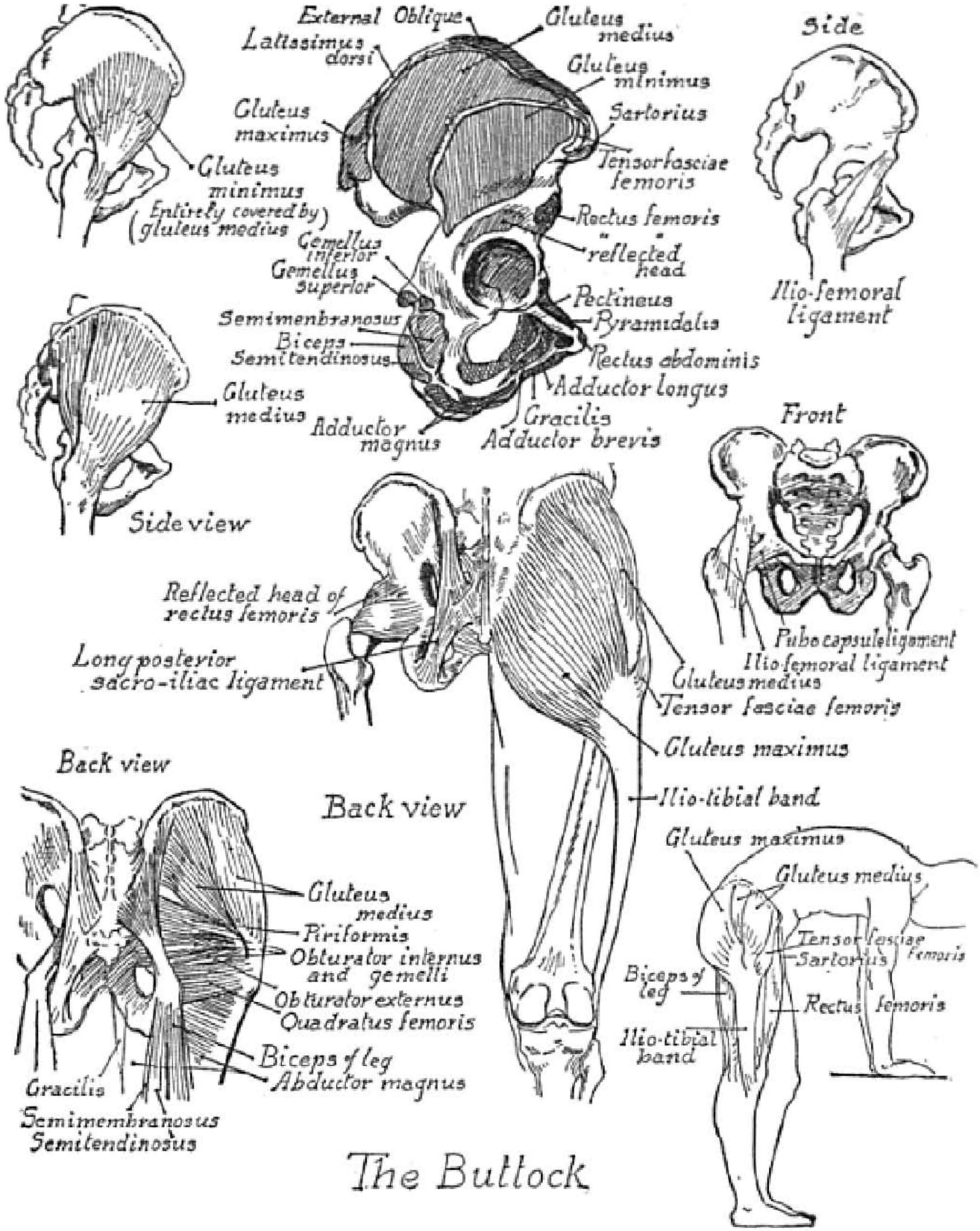



Gluteus minimus
Piriformis
Obturator internus and gemelli
Quadratus femoris
Adductors
Adductor magnus


Biceps long head
Semitendinosus
Semimembranosus

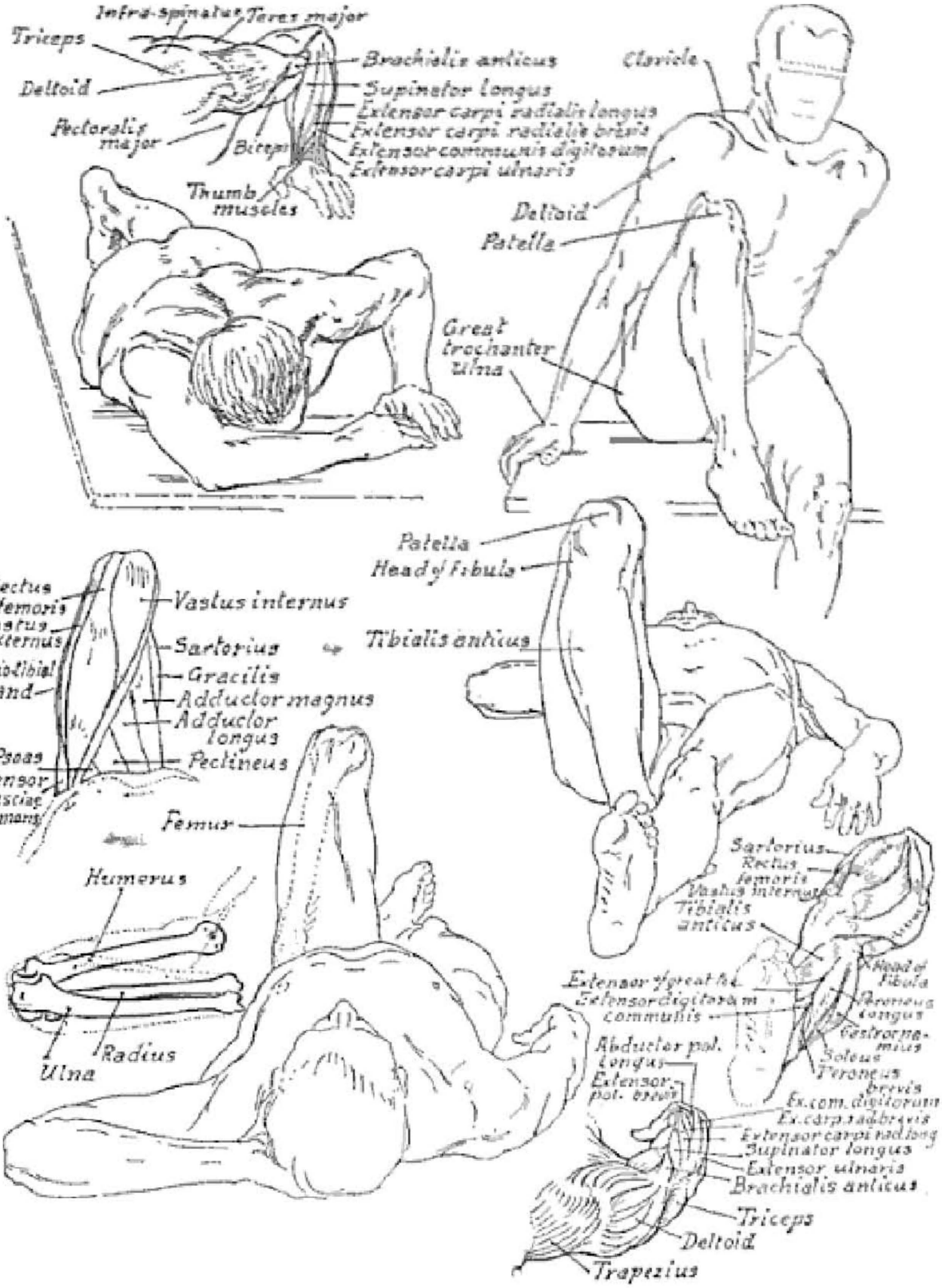
Back of Leg

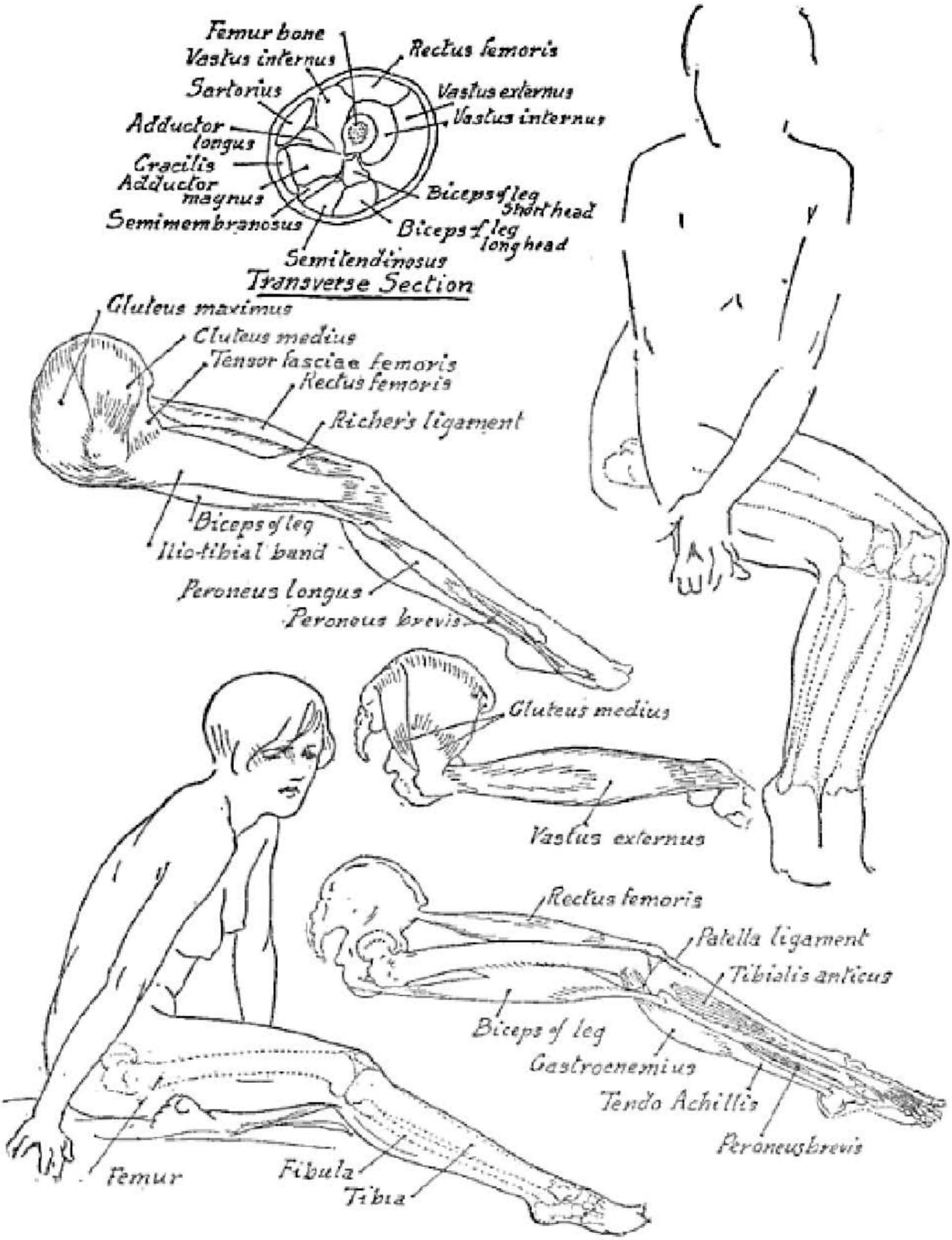

Gluteus medius
Tensor fasciae femoris
Great trochanter
Gluteus maximus
Gracilis
Semitendinosus
Adductor magnus
Semimembranosus
Ilio-tibial band
Biceps short head
Biceps long head
Semimembranosus
Vastus internus
Popliteal space

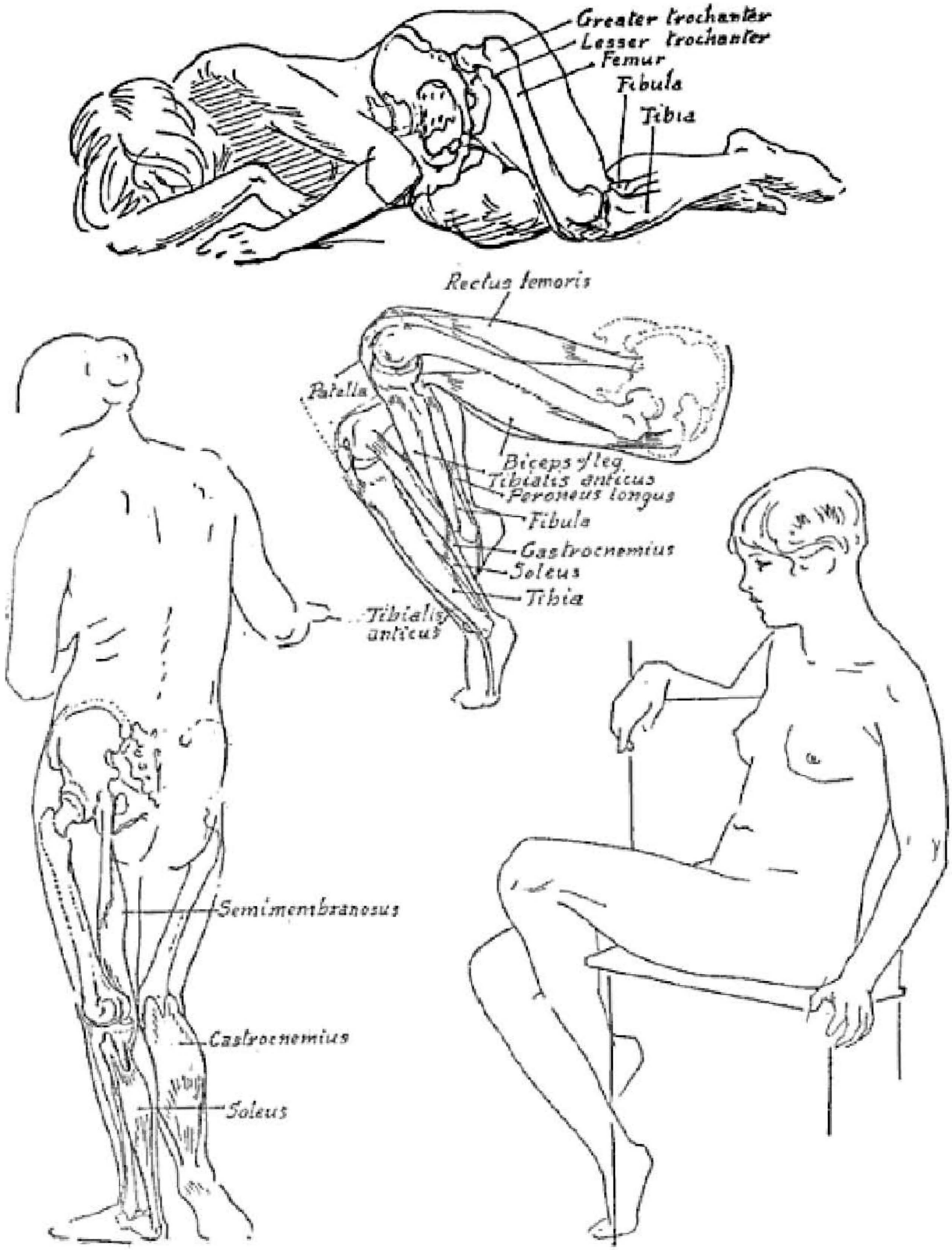

External Oblique
Gluteus medius
Latissimus dorsi
Gluteus minimus
Sartorius
Gluteus maximus
Tensor fasciae femoris
Rectus femoris
" reflected head
Gemellus inferior
Gemellus superior
Pectineus
Pyramidalis
Semimembranosus
Biceps
Semitendinosus
Rectus abdominis
Adductor longus
Gracilis
Adductor brevis
Adductor magnus
Gluteus minimus
(Entirely covered by gluteus medius
Side
Ilio-femoral ligament
Gluteus medius
Side view
Front
Pubo capsuleligament
Ilio-femoral ligament
Reflected head of rectus femoris
Long posterior sacro-iliac ligament
Gluteus medius
Tensor fasciae femoris
Gluteus maximus
Ilio-tibial band
Back view
Back view
Gluteus medius
Piriformis
Obturator internus and gemelli
Obturator externus
Quadratus femoris
Biceps of leg
Abductor magnus
Gracilis
Semimembranosus
Semitendinosus
Gluteus maximus
Gluteus medius
Tensor fasciae femoris
Sartorius
Biceps of leg
Rectus femoris
Ilio-tibial band

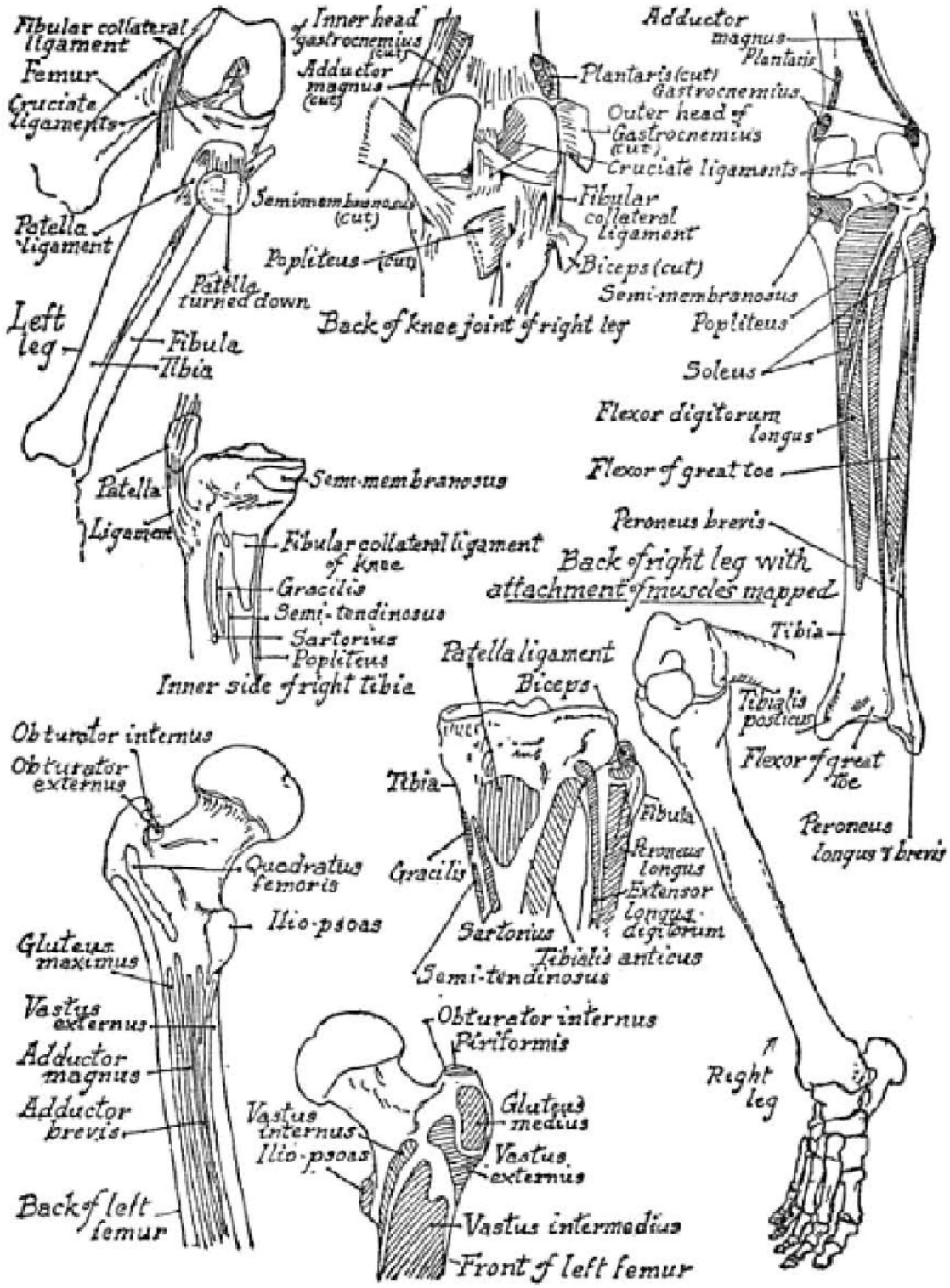
# The Buttock

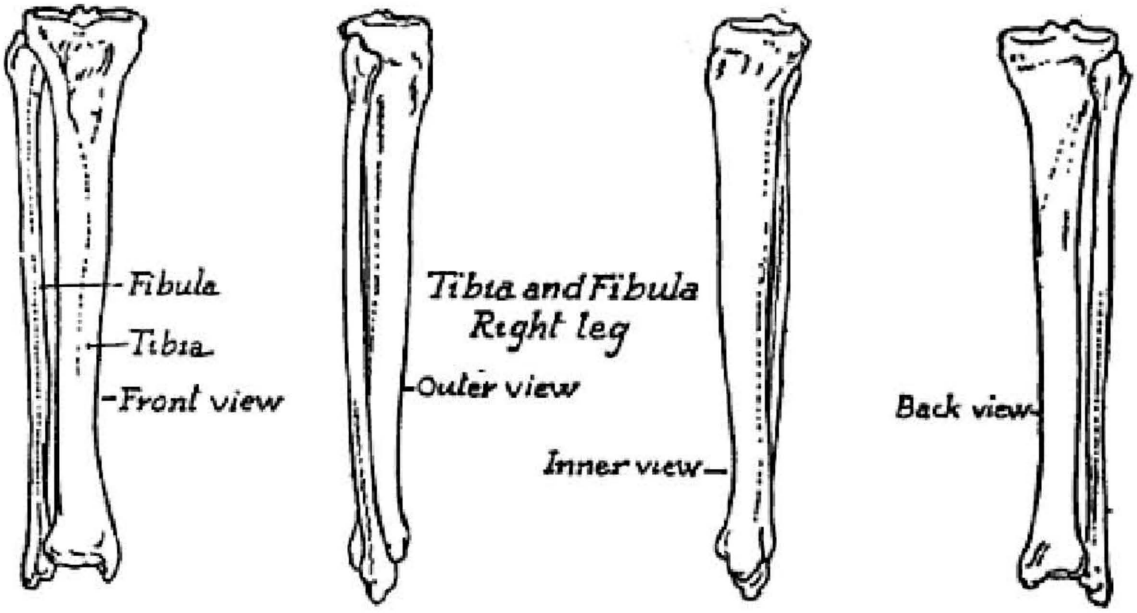

Biceps
Supinator longus
Deltoid
Supinator longus
Brachialis anticus
Teres major
Pectoralis major
Coraco-brachialis
Psoas major
Iliacus
Tensor fasciae femoris
Sartorius
Ilio-tibial band
Pectineus
Adductor long.
" major
Rectus femoris
Vastus Ext.
Vastus int.
Supinator long.
Bicipital fascia
Biceps
Deltoid
Flexor ulnaris
Condyle of humerus
Triceps
Coraco-brachialis
Teres major
Latissimus dorsi
Pectoralis major
Rectus femoris (origin)
Pectineus
Adductor Longus
Adductor Major
Ad. brevis
Vastus Int.
Vastus Ext.
Femur bone
Patella
Gastrocnemius
Soleus
Tibia
Naviculer
Os calcis
Astragalus
Cuneiforms
Gluteus Medius
Greater head of Trochanter
Rectus Femoris (cut)
Vastus Externus
Adductor muscles
(Inserted middle back of Femur bone)
Vastus internus inserted in Patella

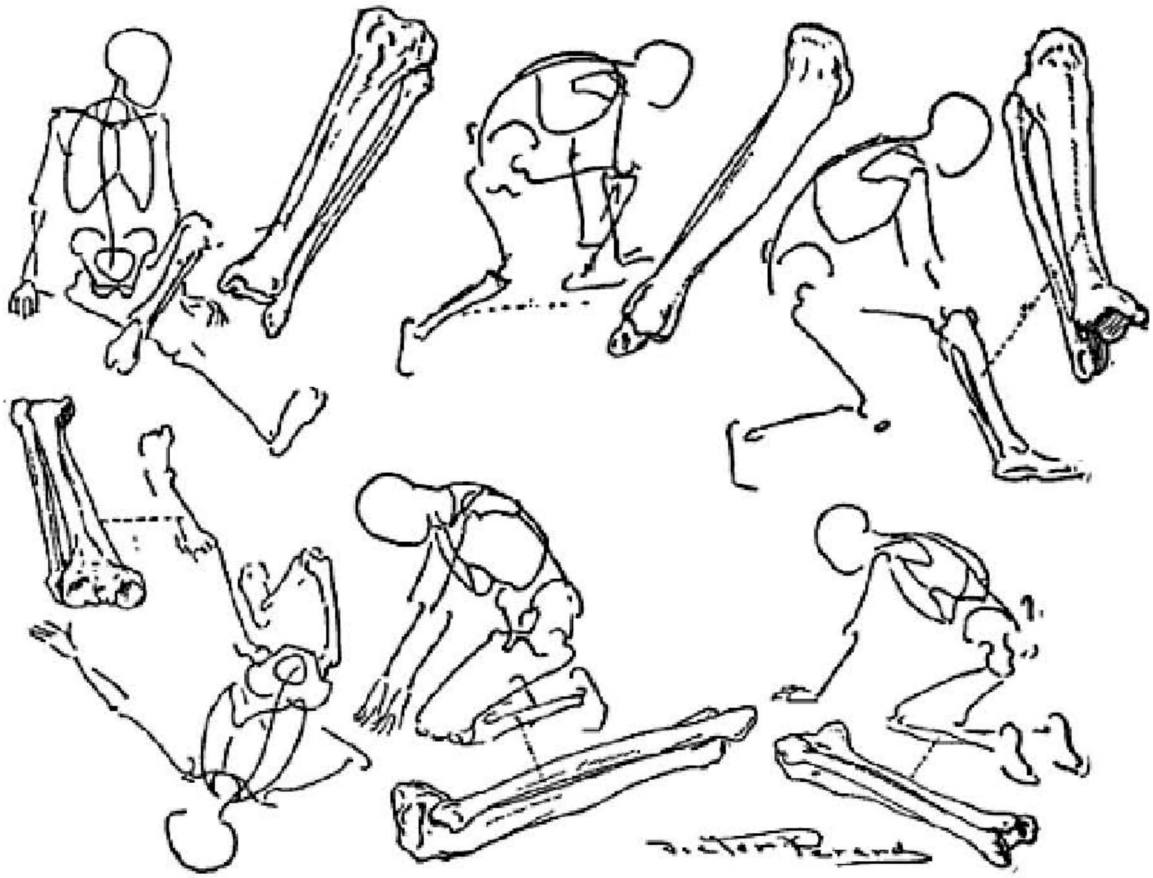

Infra-spinatus
Teres major
Triceps
Brachialis anticus
Deltoid
Supinator longus
Extensor carpi radialis longus
Pectoralis major
Biceps
Extensor carpi radialis brevis
Extensor communis digitorum
Extensor carpi ulnaris
Thumb muscles
Clavicle
Deltoid
Patella
Great trochanter
Ulna
Patella
Head of fibula
Rectus femoris
Vastus internus
Vastus externus
Sartorius
Tibialis anticus
Iliotibial band
Gracilis
Adductor magnus
Adductor longus
Psoas
Pectineus
Tensor fasciæ femoris
Femur
Humerus
Radius
Ulna
Sartorius
Rectus femoris
Vastus internus
Tibialis anticus
Head of Fibula
Extensor hallucis
Extensor digitorum communis
Peroneus longus
Gastrocnemius
Soleus
Abductor pol. longus
Extensor pol. brevis
Peroneus brevis
Ex. com. digitorum
Ex. carpi abbrevis
Extensor carpi radialis
Supinator longus
Extensor ulnaris
Brachialis anticus
Triceps
Deltoid
Trapezius

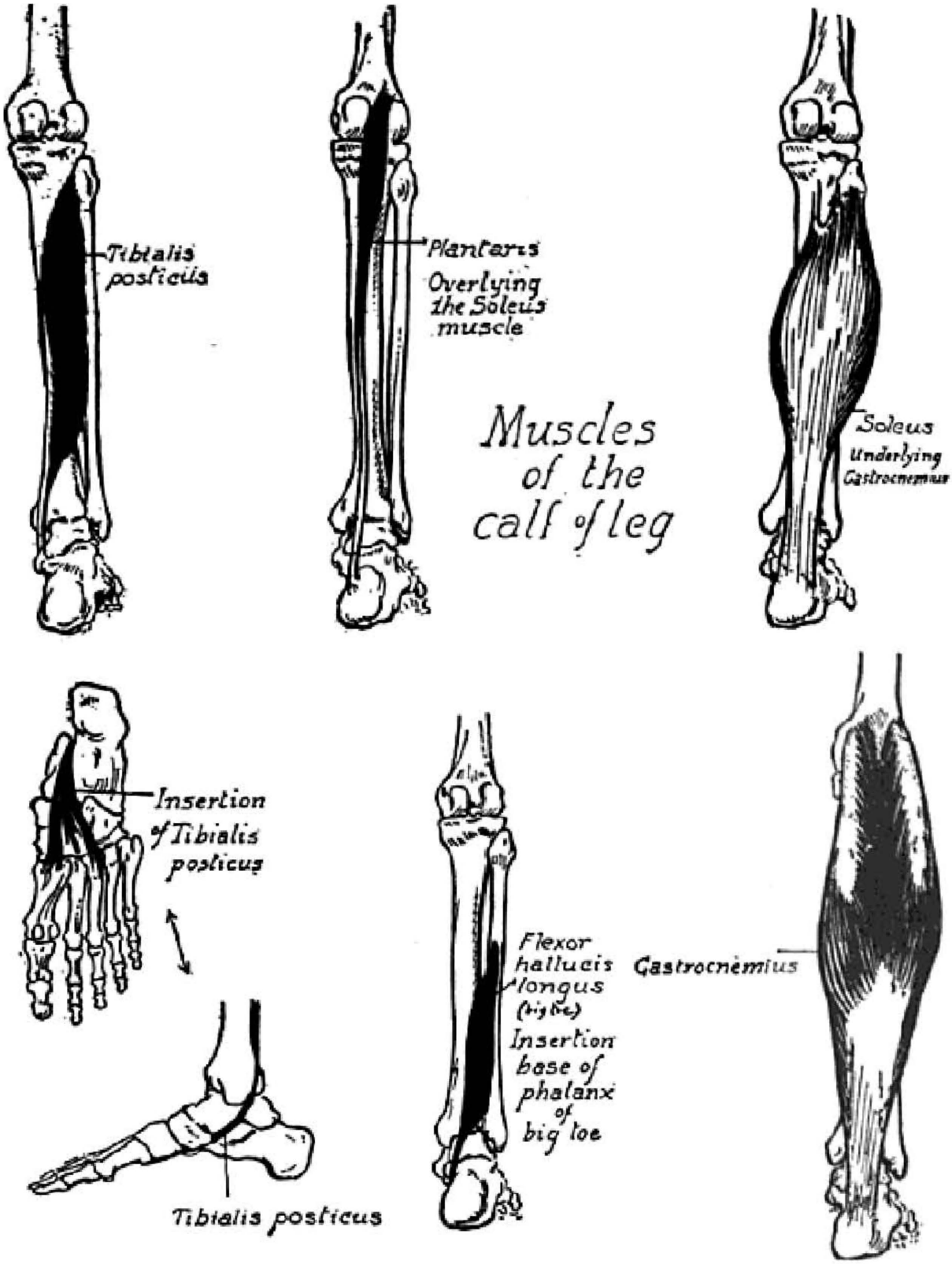

Femur bone
Vastus internus
Rectus femoris
Sartorius
Vastus externus
Vastus internus
Adductor longus
Gracilis
Adductor magnus
Biceps of leg short head
Semimembranosus
Biceps of leg long head
Semitendinosus
Transverse Section
Gluteus maximus
Gluteus medius
Tensor fasciae femoris
Rectus femoris
Richer's ligament
Biceps of leg
Ilio-tibial band
Peroneus longus
Peroneus brevis
Gluteus medius
Vastus externus
Rectus femoris
Patella ligament
Tibialis anticus
Biceps of leg
Gastrocnemius
Tendo Achillis
Peroneus brevis
Femur
Fibula
Tibia


Greater trochanter
Lesser trochanter
Femur
Fibula
Tibia
Rectus femoris
Patella
Biceps of leg
Tibialis anticus
Peroneus longus
Fibula
Gastrocnemius
Soleus
Tibia
Tibialis anticus
Semimembranosus
Gastrocnemius
Soleus


Fibular collateral ligament
Femur
Cruciate ligaments
Patella ligament
Patella turned down
Left leg
Fibula
Tibia
Inner head of gastrocnemius (cut)
Adductor magnus (cut)
Semimembranosus (cut)
Popliteus (cut)
Back of knee joint of right leg
Plantaris (cut)
Outer head of Gastrocnemius (cut)
Cruciate ligaments
Fibular collateral ligament
Biceps (cut)
Adductor magnus
Plantaris
Gastrocnemius
Semi-membranosus
Popliteus
Soleus
Flexor digitorum longus
Flexor of great toe
Peroneus brevis
Back of right leg with attachment of muscles mapped
Tibia
Tibialis posticus
Flexor of great toe
Peroneus longus & brevis
Patella
Ligament
Semi-membranosus
Fibular collateral ligament of knee
Gracilis
Semi-tendinosus
Sartorius
Popliteus
Inner side of right tibia
Patella ligament
Biceps
Tibia
Gracilis
Sartorius
Semi-tendinosus
Fibula
Peroneus longus
Extensor longus digitorum
Tibialis anticus
Obturator internus
Obturator externus
Quadratus femoris
Ilio-psoas
Gluteus maximus
Vastus externus
Adductor magnus
Adductor brevis
Back of left femur
Obturator internus
Piriformis
Gluteus medius
Vastus internus
Ilio-psoas
Vastus externus
Vastus intermedius
Front of left femur
Right leg


Fibula
Tibia
Front view
Tibia and Fibula
Right leg
Outer view
Inner view
Back view



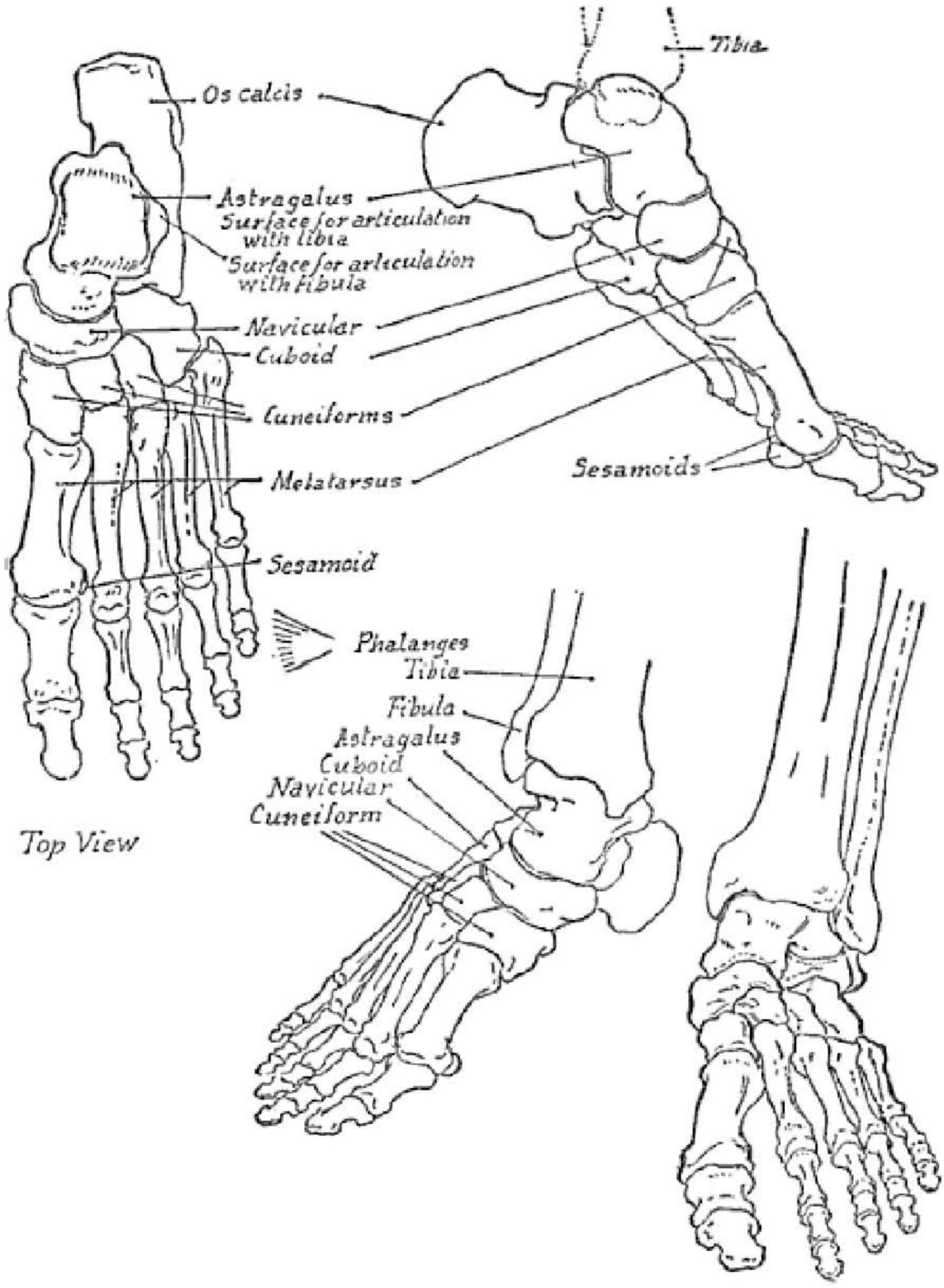


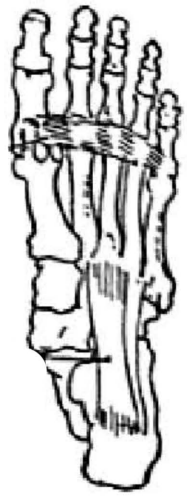

# Muscles of the calf of leg

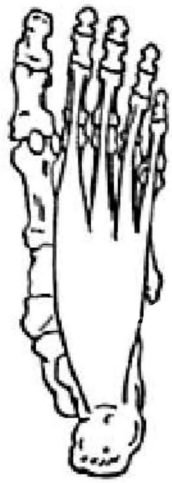


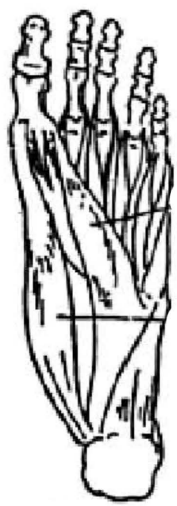
# PART EIGHT

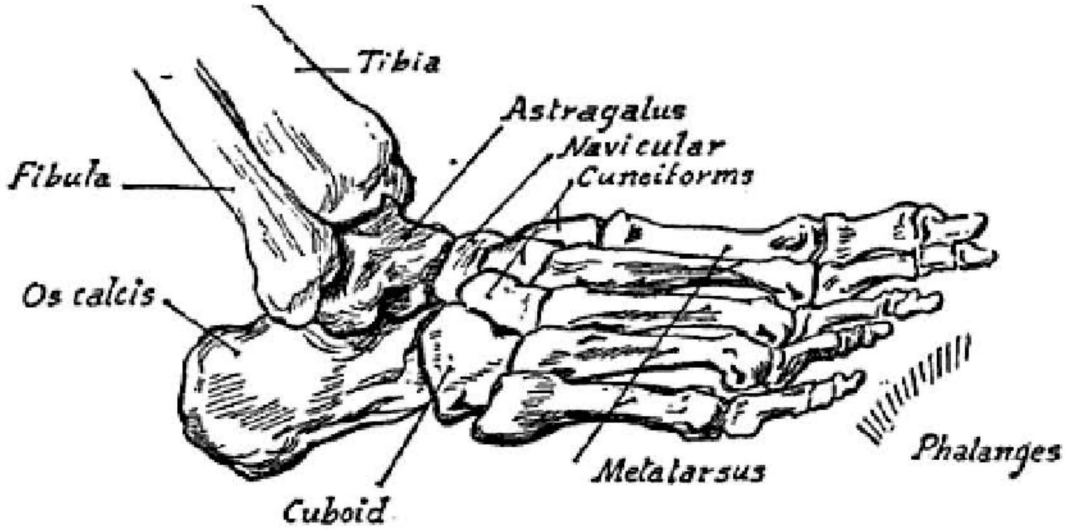
# THE FOOT

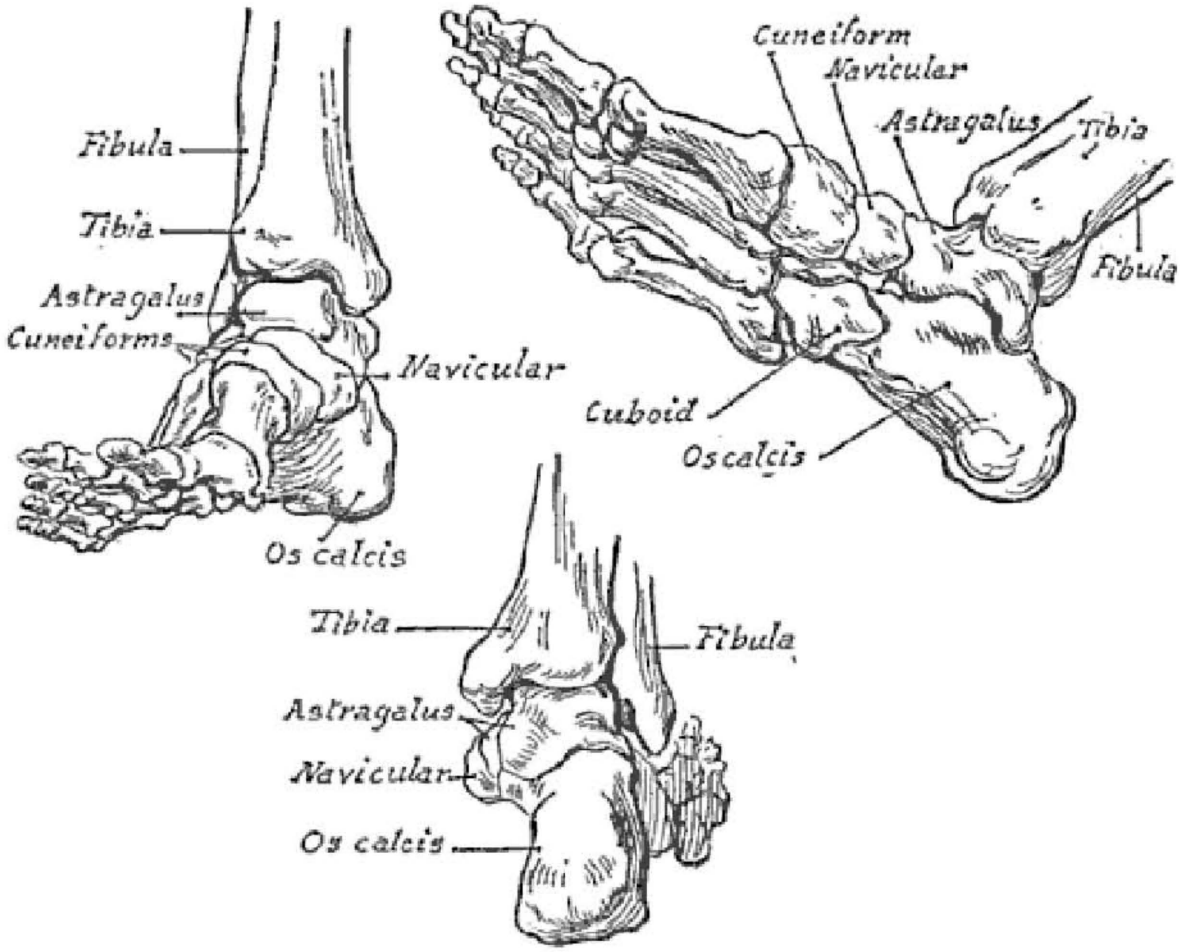

Tibia
Os calcis
Astragalus
Surface for articulation with tibia
Surface for articulation with fibula
Navicular
Cuboid
Cuneiforms
Metatarsus
Sesamoids
Sesamoid
Phalanges
Tibia
Fibula
Astragalus
Cuboid
Navicular
Cuneiform
Top View

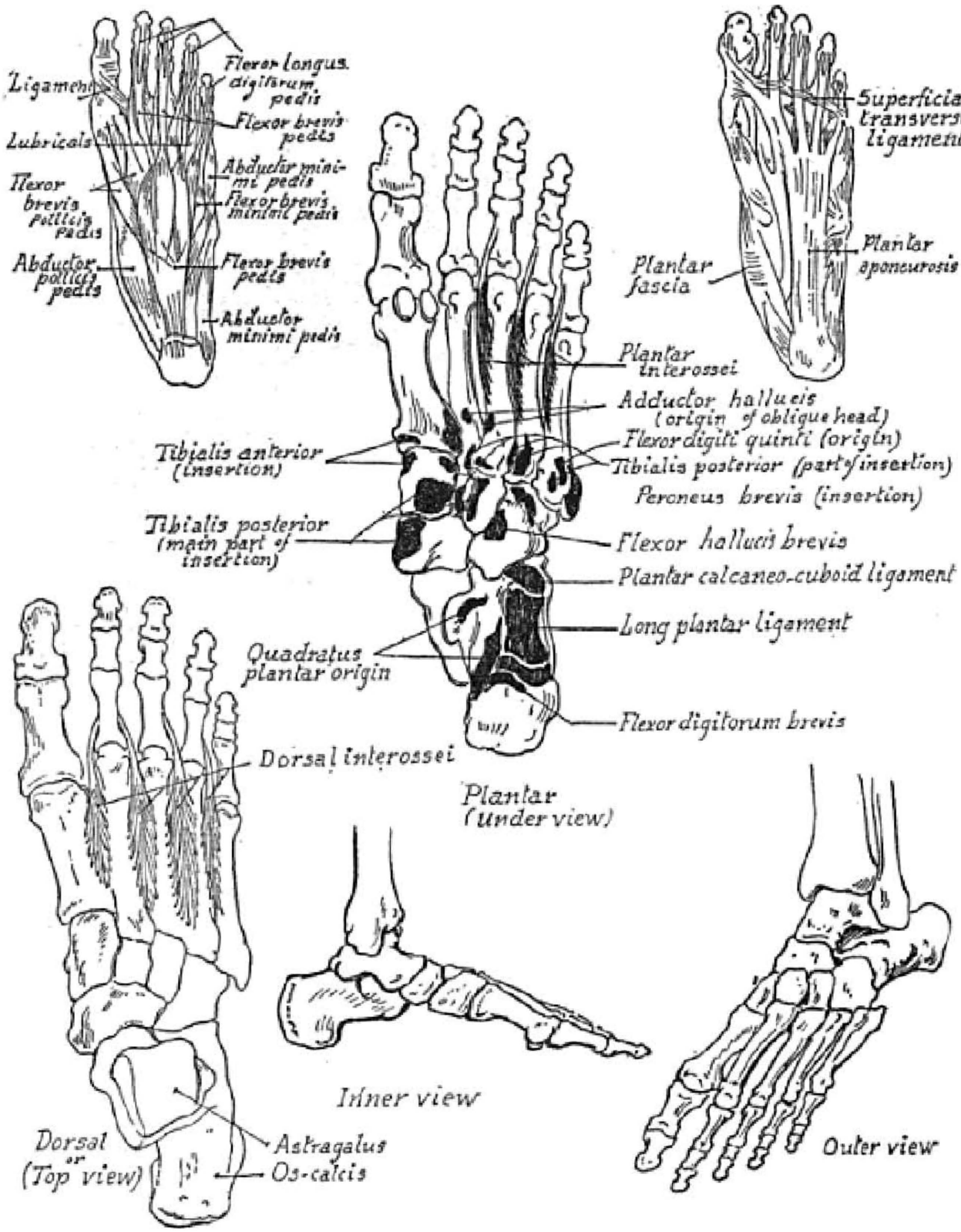



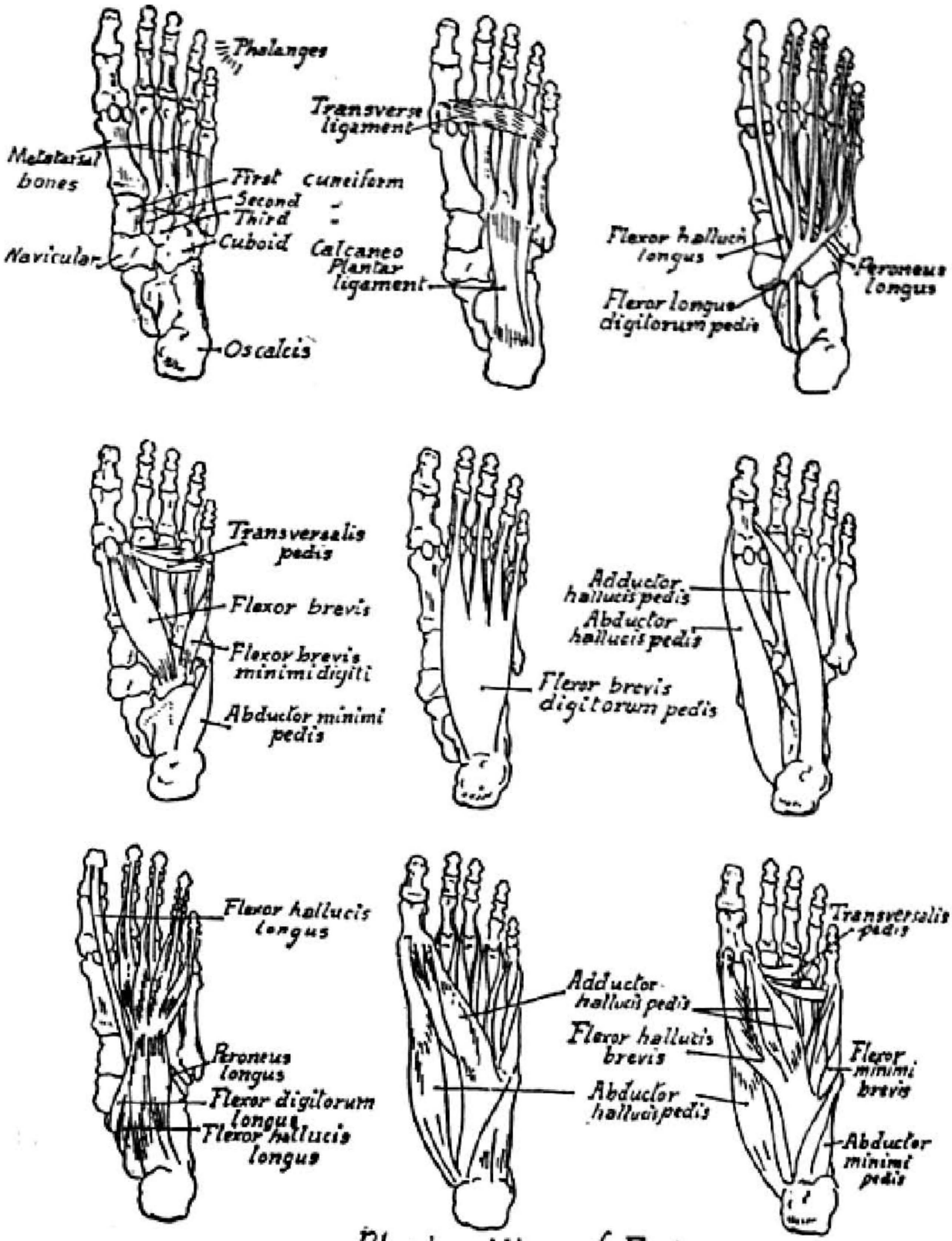



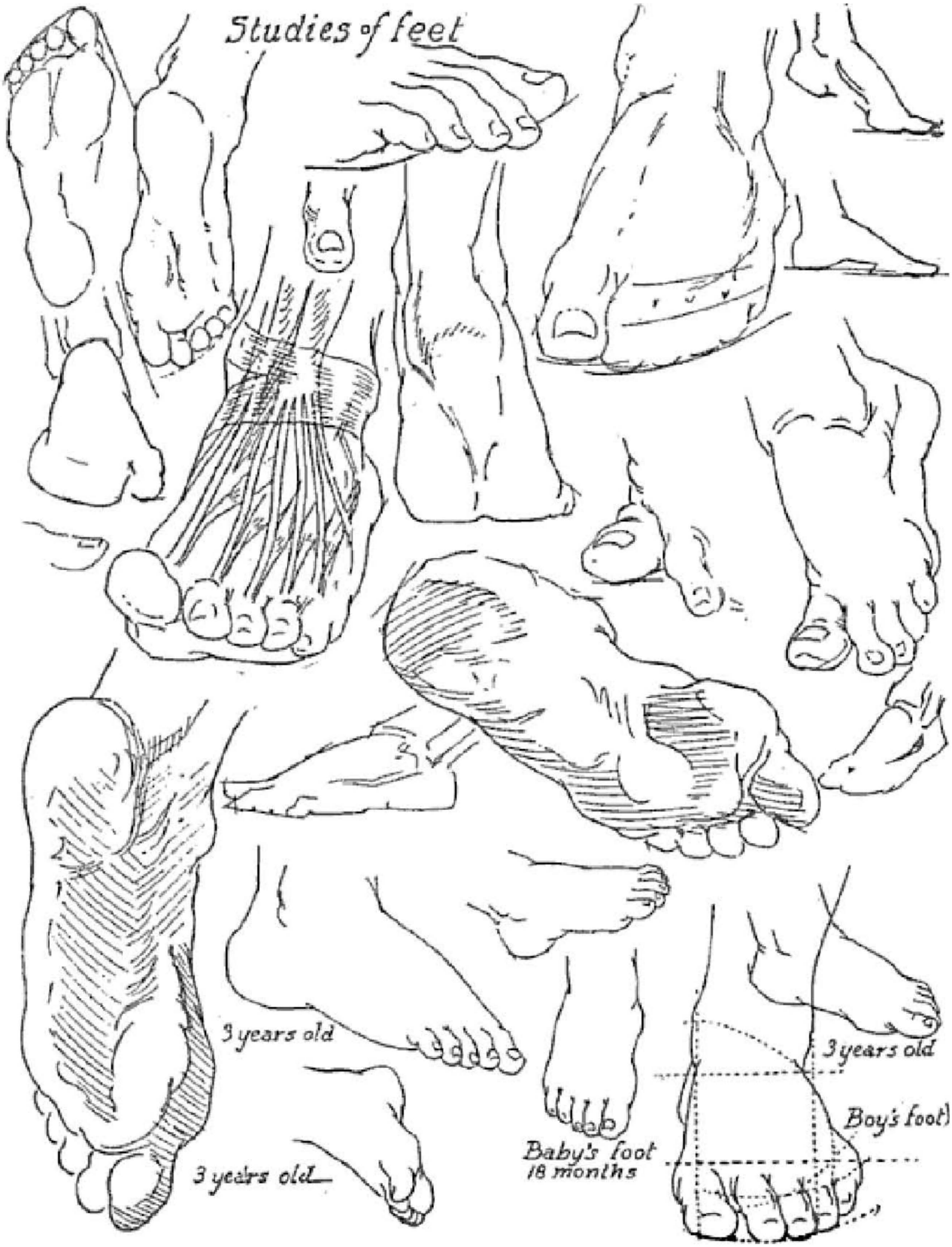


Tibia
Astragalus
Navicular
Cuneiforms
Fibula
Os calcis
Phalanges
Metatarsus
Cuboid

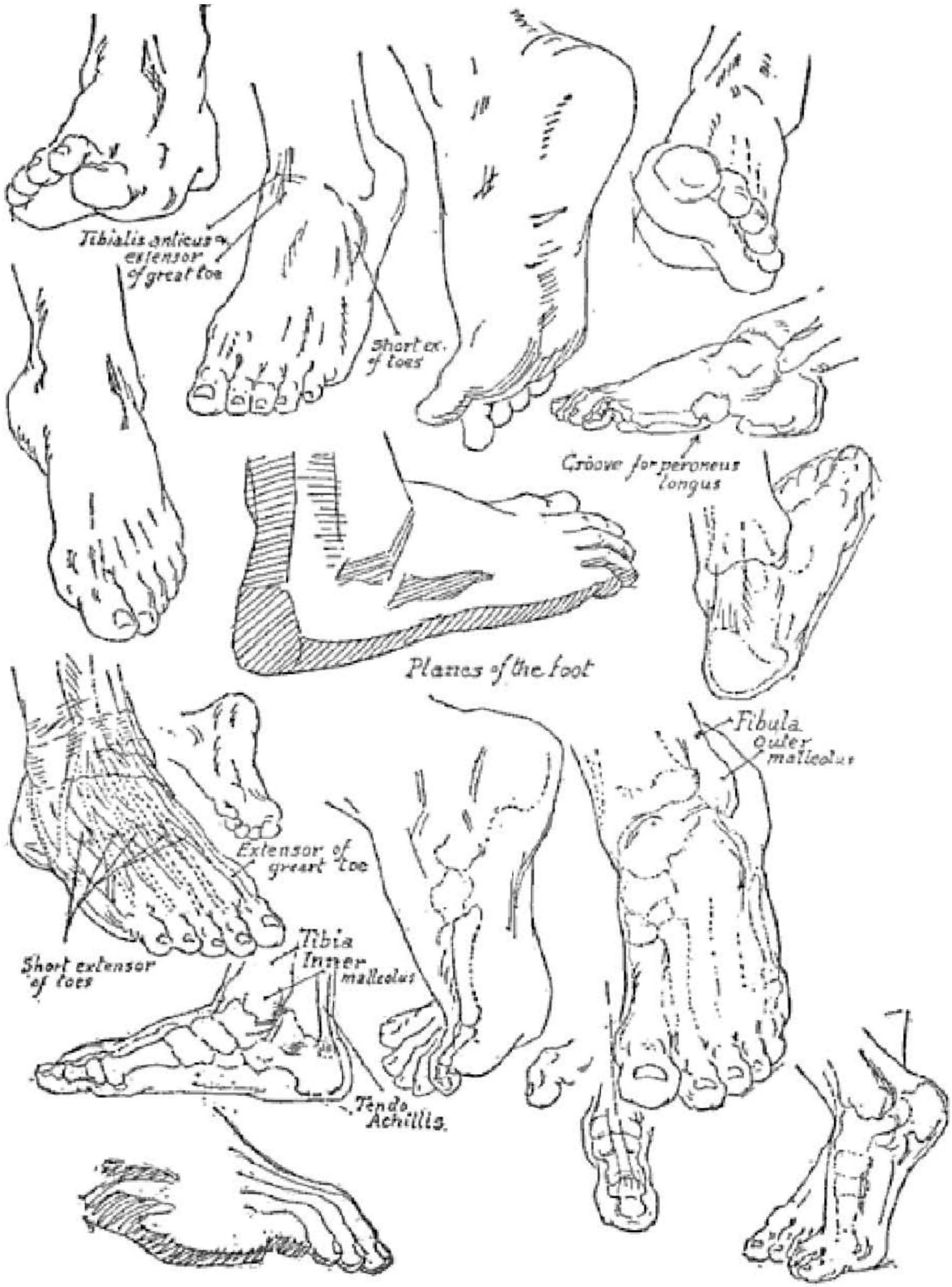

Fibula
Tibia
Astragalus
Cuneiforms
Navicular
Os calcis
Cuneiform
Navicular
Astragalus
Tibia
Fibula
Cuboid
Os calcis
Tibia
Fibula
Astragalus
Navicular
Os calcis


Ligament
Flexor longus digitorum pedis
Flexor brevis pedis
Lubricals
Abductor minimi pedis
Flexor brevis pollicis pedis
Flexor brevis minimi pedis
Abductor pollicis pedis
Flexor brevis pedis
Abductor minimi pedis
Superficial transverse ligament
Plantar aponeurosis
Plantar fascia
Plantar interossei
Adductor hallucis (origin of oblique head)
Flexor digiti quinti (origin)
Tibialis anterior (insertion)
Tibialis posterior (part of insertion)
Peroneus brevis (insertion)
Tibialis posterior (main part of insertion)
Flexor hallucis brevis
Plantar calcaneo-cuboid ligament
Long plantar ligament
Quadratus plantar origin
Flexor digitorum brevis
Dorsal interossei
Plantar (under view)
Inner view
Outer view
Dorsal (Top view)
Astragalus
Os-calcis




Plantar View of Foot


Studies of feet
3 years old
3 years old
Baby's foot
18 months
3 years old
Boy's foot

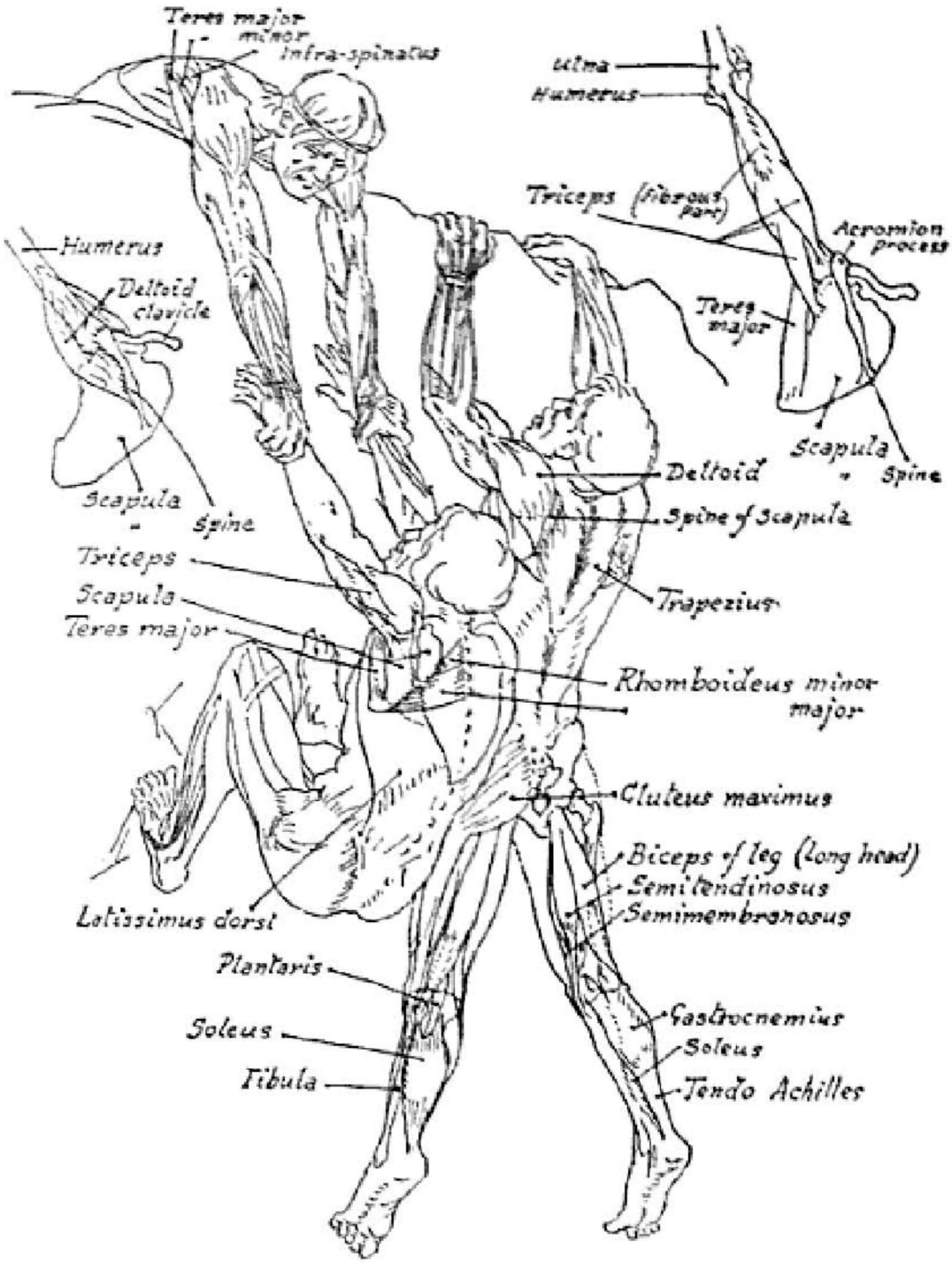

Tibialis anticus extensor of great toe
Short ex. of toes
Groove for peroneus longus
Planes of the foot
Fibula outer malleolus
Extensor of great toe
Tibia
Inner malleolus
Short extensor of toes
Tendo Achillis



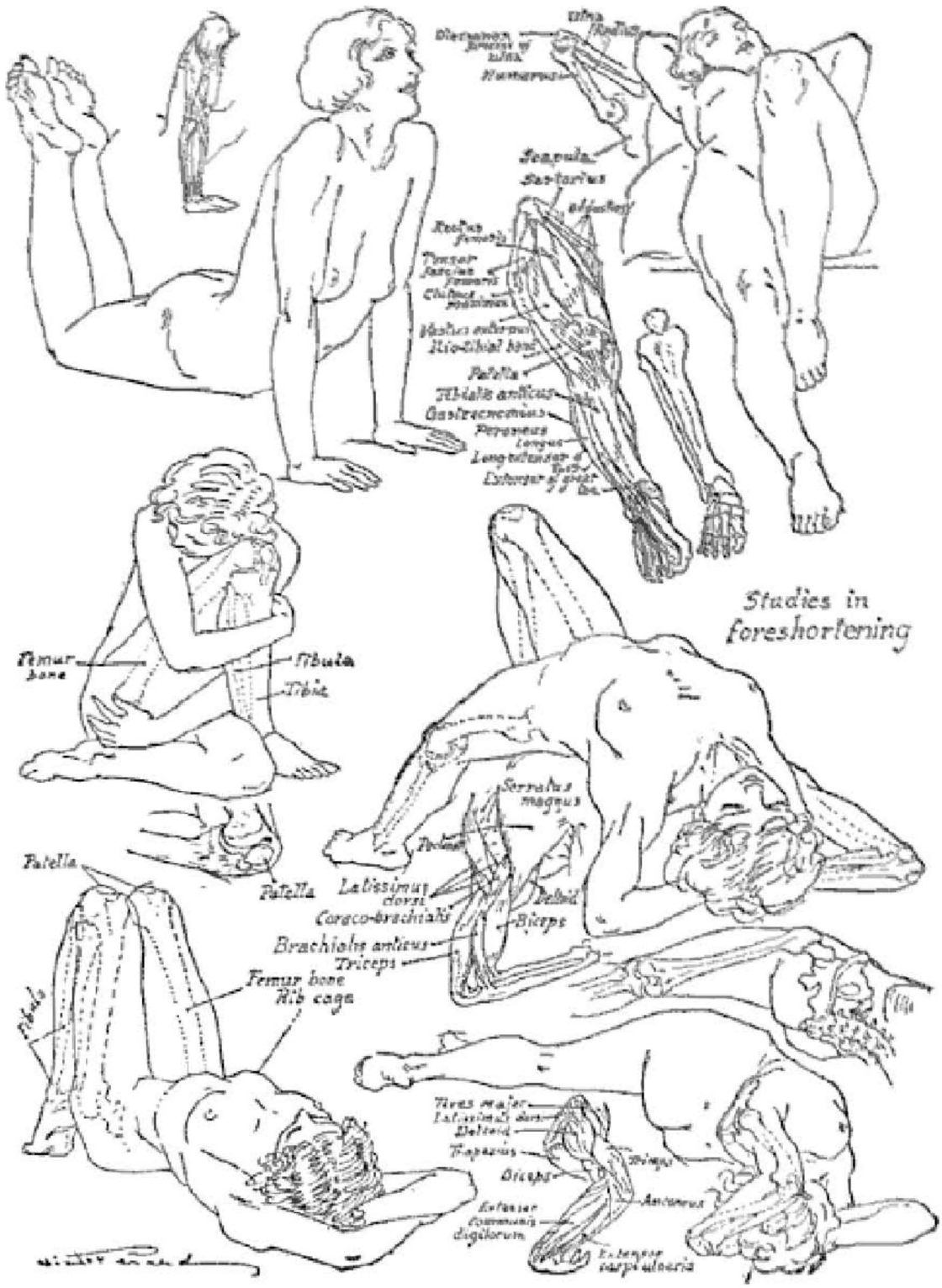
# PART NINE

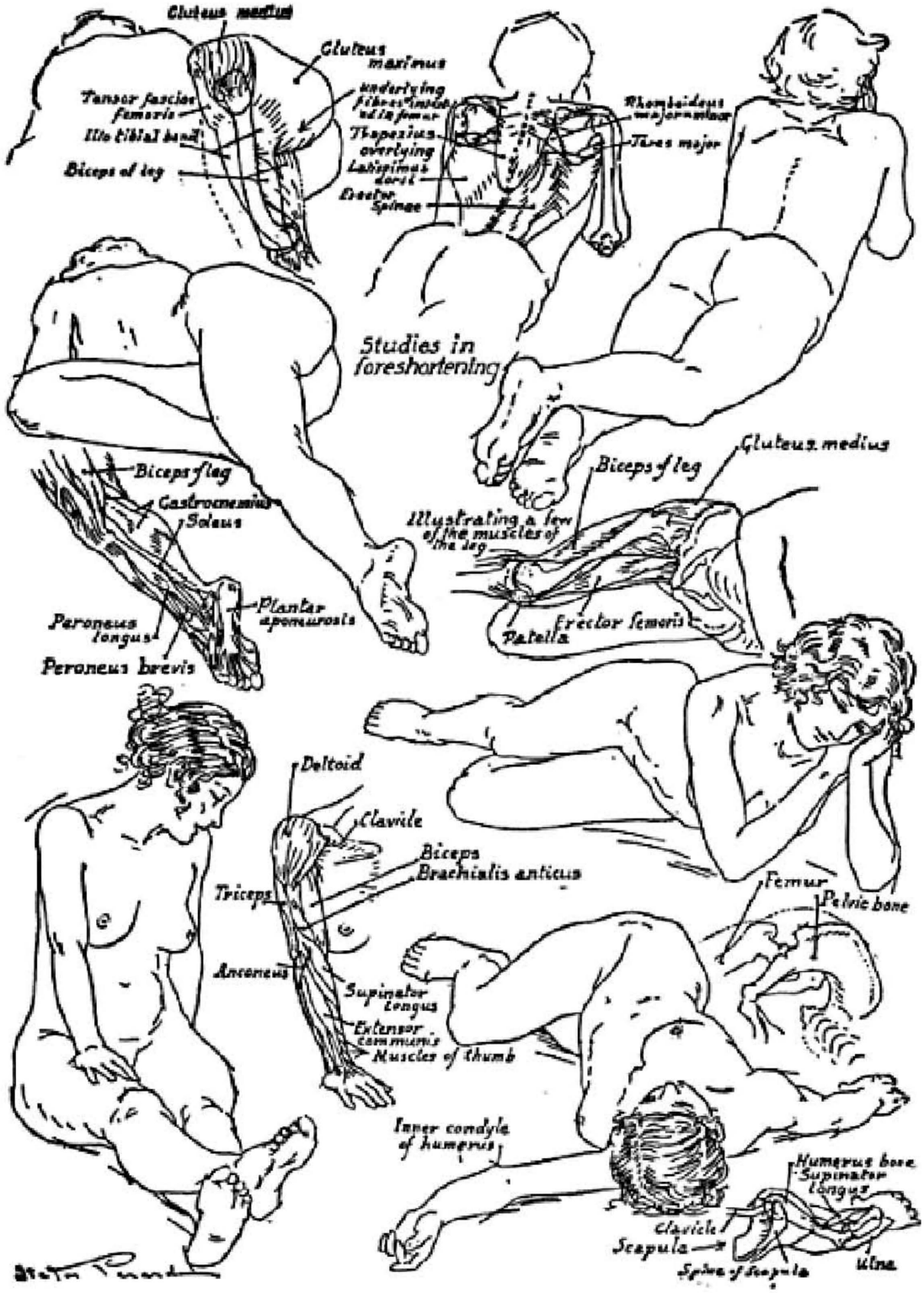
# THE ECORCHE AND MUSCLES OF THE BODY

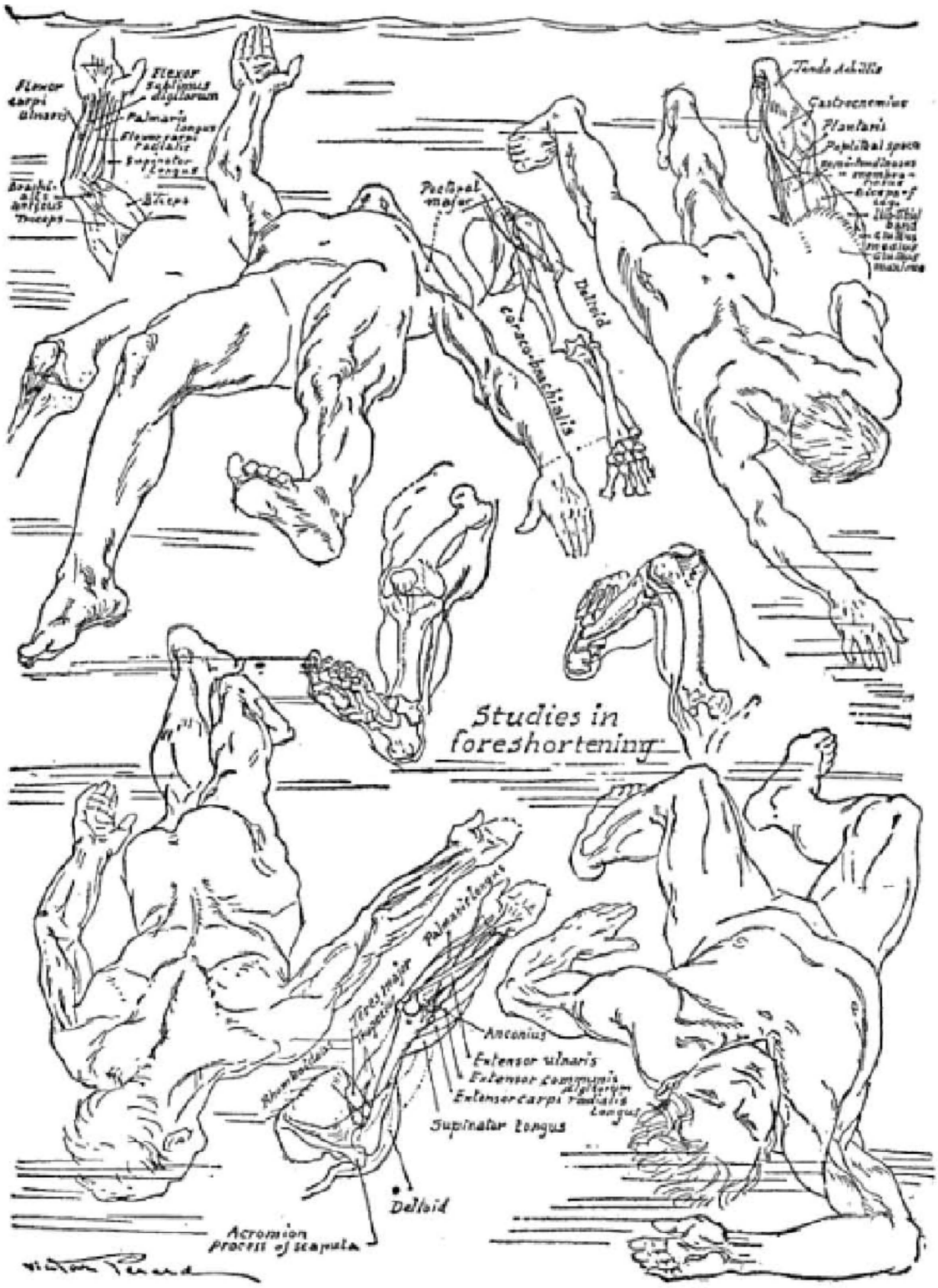


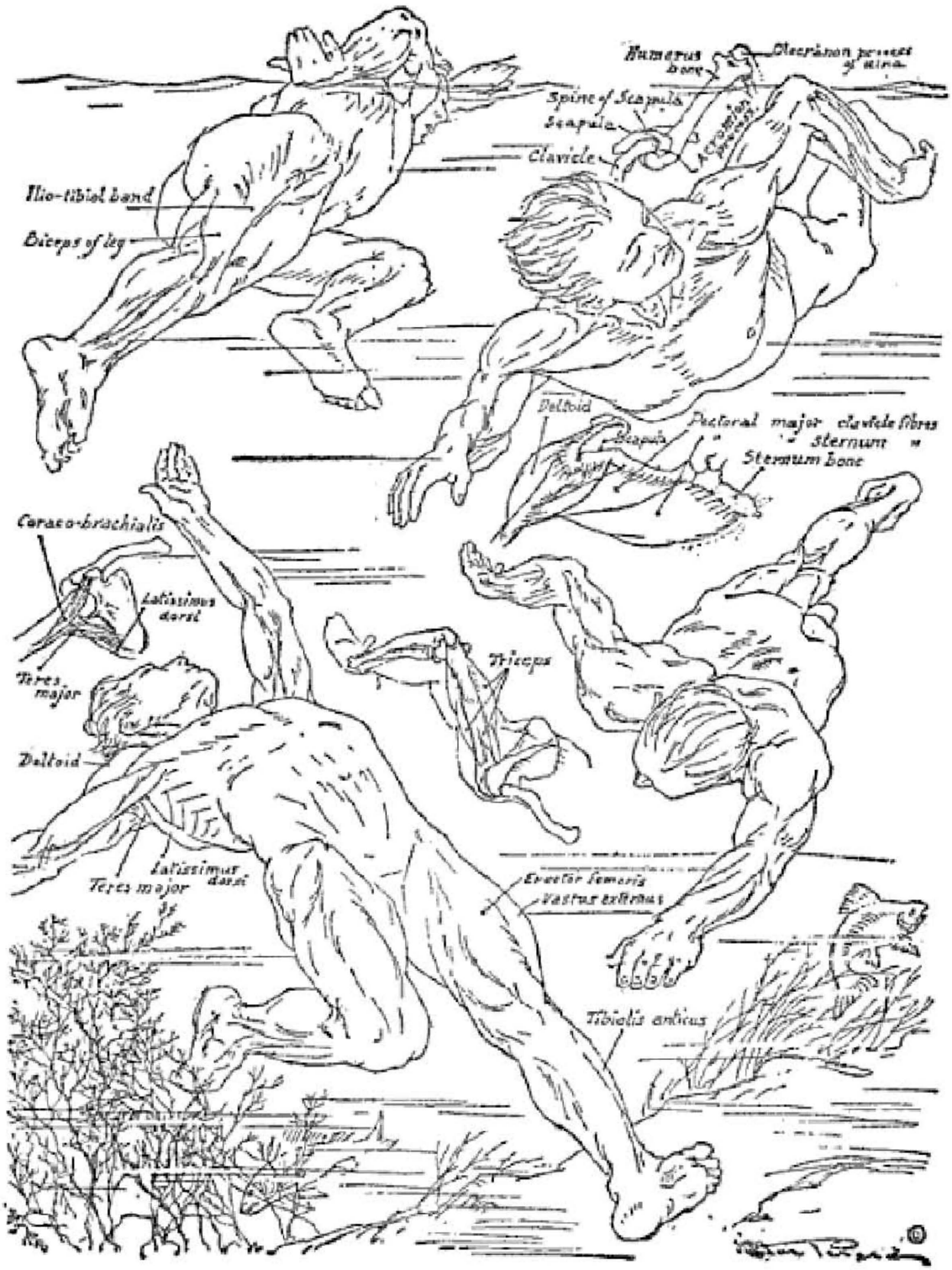

Teres major
minor
Infra-spinatus
Humerus
Deltoid
clavicle
Scapula
Spine
Triceps
Scapula
Teres major
Latissimus dorsi
Plantaris
Soleus
Tibula
ulna
Humerus
Triceps (fibrous part)
Acromion process
Teres major
Scapula
Spine
Deltoid
Spine of scapula
Trapezius
Rhomboideus minor
major
Gluteus maximus
Biceps of leg (long head)
Semitendinosus
Semimembranosus
Gastrocnemius
Soleus
Tendo Achilles




Ulna
Radius
Humerus
Scapula
Sartorius
Rectus femoris
Tensor fasciae femoris
Gluteus maximus
Vastus externus
Ilio-tibial band
Patella
Tibialis anticus
Gastrocnemius
Peroneus longus
Long extensor of toes
Extensor of great toe
Studies in foreshortening
Femur bone
Fibula
Tibia
Serratus magnus
Pectoralis
Latissimus dorsi
Deltoid
Coraco-brachialis
Biceps
Brachialis anticus
Triceps
Femur bone
Rib cage
Teres major
Infraspinatus
Deltoid
Trapezius
Biceps
Triceps
Anconeus
Extensor communis digitorum
Extensor carpi ulnaris


Gluteus medius
Gluteus maximus
Tensor fascia femoris
Ilio tibial band
Biceps of leg
Rhomboideus major
Teres major
Studies in foreshortening
Biceps of leg
Gluteus medius
Gastrocnemius
Soleus
Plantar aponeurosis
Peroneus longus
Peroneus brevis
Erector femoris
Patella
Deltoid
Clavicle
Biceps
Brachialis anticus
Triceps
Anconeus
Supinator longus
Extensor communis
Muscles of thumb
Femur
Pelvic bone
Inner condyle of humerus
Humerus bone
Supinator longus
Clavicle
Scapula
Spine of scapula
Ulna


Flexor carpi ulnaris
Flexor Sublimus digitorum
Palmaris longus
Flexor carpi radialis
Supinator longus
Biceps
Brachialis anticus
Triceps
Pectoral major
Deltoid
Coracobrachialis
Tendo Achillis
Gastrocnemius
Plantaris
Popliteal space
Studies in foreshortening
Pectoralis major
Anconius
Extensor ulnaris
Extensor communis digitorum
Extensor carpi radialis longus
Supinator longus
Deltoid
Acromion process of scapula


Humerus bone
Olecranon process of ulna
Spine of Scapula
Scapula
Acromion process
Clavicle
Ilio-tibial band
Biceps of leg
Deltoid
Pectoral major clavicle fibres
sternum "
Scapula
Sternum Bone
Coraco-brachialis
Latissimus dorsi
Teres major
Triceps
Deltoid
Latissimus dorsi
Teres major
Extensor femoris
Vastus externus
Tibialis anticus

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